

WE SHOW YOU THE WAY TO SPRAY TRADITIONAL FLAMES

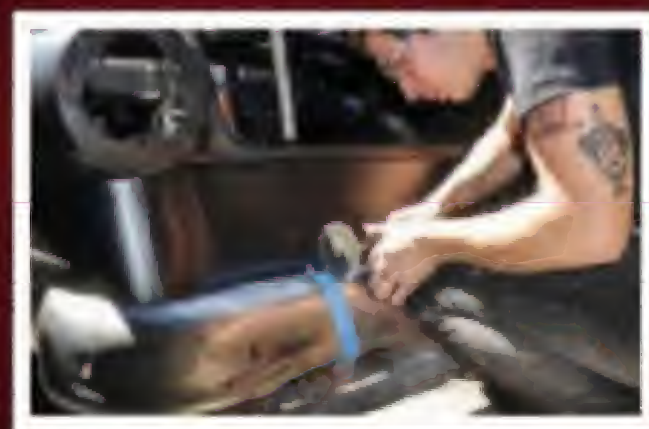
STREET RODDER[®]

The World's
Rodding Authority

SEPTEMBER 2019 VOL. 48 NO. 9 STREETRODDER.COM

The
1958 Edsel

Where
FoMoCo
Missed the
Mark...



Alloway's Hot Rods Hits

The Bull's-Eye

Pg. 54

Hollywood Hot
Rods & Our Road
Tour '55 Ford
"Custom"

Plus

BUILDING

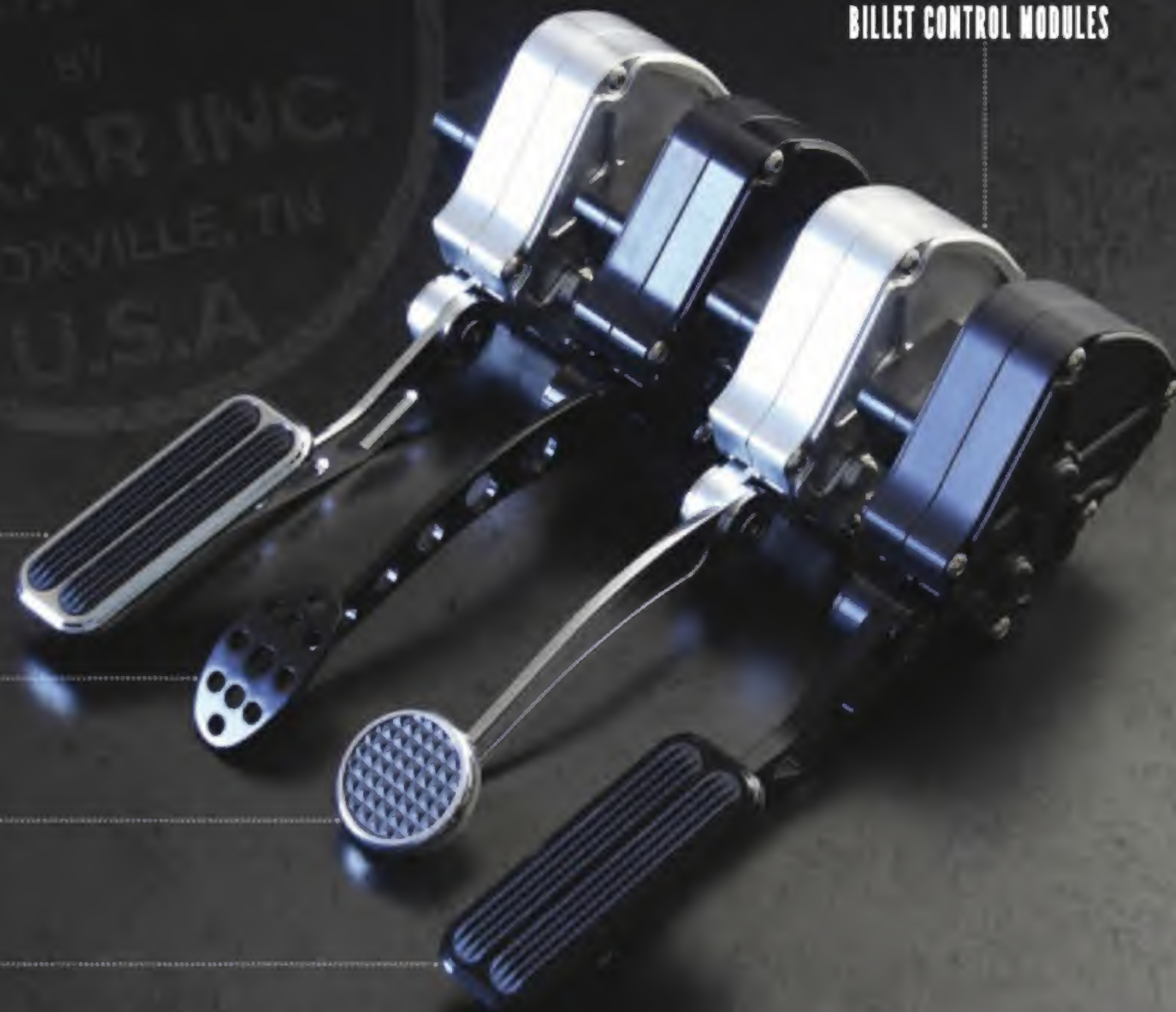
for Torque **pt.2** How to
Motorvate Your Hot Rod

ASSEMBLE

a "Quiet" & Strong
Ford 9-Inch Rearend

TEN: PUBLISHING

DRIVE-BY-WIRE THROTTLE ASSEMBLIES



BILLET CONTROL MODULES

CHROME PLATED

BLACK STEEL LAKESTER

GOOLSBY EDITION

ANODIZED ALUMINUM



QUALITY...PLAIN & SIMPLE®

1-877-469-7440 | LOKAR.COM

CONTENTS

SEPTEMBER 2019 VOL. 48 NO. 9

Features & Tech

18

The Edsel

George & Kathy Lange's '58 Edsel Ranger

34

Madam X

Wes Rydell's '40 Cadillac convertible

48

Clarence Got Clearance

Clarence Goodwin's '61 Chevy Impala

64

Fordor to the Past

Jim Lindsey's '32 Ford fordor sedan

70

The Right One

John & Pat Miller's
'32 Ford deuce roadster

86

Home is Where the Hot Rod Is

Nick Griot's '63 Lincoln Continental hardtop

92

Scrape'd

Barry Weiss' '39 Lincoln Zephyr

24

Keeping it Quiet

John's Industries' 9-inch axles
are the strong, silent type

40

Burning Sensation

Part 1: Tips 'n' tricks for "traditional" flames

54

Nip and Tuck

Hollywood Hot Rods begins
working their magic on our '55 Ford

76

Feeding the Beast

Part 2: Installing a top end on
our 383ci stroker engine



Departments

08 On the Road

10 For Starters

14 Window Shopper

16 Street Corner

98 Fix'Ems

100 Street Shaker

102 Early Iron

104 Shop Manual

122 Professor Hammer

•On the Cover: In 1958, it may have been the "wrong car at the wrong time," but 70 years later, thanks to Bobby Alloway, George and Kathy Lange's Edsel is all right! **Photography by Jorge Nunez.**

•Table of Contents: In a sea of electricity on today's urban highways and byways, the anti-tree-hugging land yachts of the '50s and '60s could not be more ever-present—Nick Griot's Continental drop-top is a perfect example. **Photography by Jorge Nunez.**

STREET RODDER (ISSN 0277-5735), September 2019, Vol. 48, No. 9, is published monthly by TEN: Publishing Media, LLC, 275 Madison Avenue, 14th Floor, New York, NY 10016. Periodicals postage paid at New York, NY, and additional mailing offices. Copyright ©2019 by TEN: Publishing Media, LLC. All Rights Reserved. Printed in the USA. SUBSCRIPTIONS U.S. and U.S. possessions \$29.95 for 12 issues. Canadian add \$12.00 postage and all other countries add \$24.00 (for surface mail postage). Payment in advance, U.S. funds only. **POSTMASTER:** Send all UAA to CFS. (See DMM 707.4.12.5); NON-POSTAL AND MILITARY FACILITIES: send address corrections to **STREET RODDER**, P.O. Box 420235, Palm Coast, FL 32142-0235.

STREET RODDER ♦ SEPTEMBER 2019 **3**

HARBOR FREIGHT

QUALITY TOOLS AT RIDICULOUSLY LOW PRICES

1,000+ Stores Nationwide
HarborFreight.com

SUPER COUPON
FREE

OVER 5,000
5 STAR REVIEWS

SUPER BRIGHT LED SMD WORK LIGHT/FLASHLIGHT

- Super Strong, Ultra-Lightweight Composite Plastic
- Magnetic Base & 360° Swivel
- Hook for Hands-Free Operation
- 3 AAA Batteries (Included)
- 144 Lumens

ALL IN A SINGLE SUPER POWERFUL LIGHT

COMPARE TO PERFORMANCE \$13.52
ITEM 63878/63991/64005
MODEL: W2364 69567/60566/63601/67227 shown

72058228

Limit 1 coupon per customer per day. Save 20% on any 1 item purchased. Cannot be used with other discounts or prior purchases. Original coupon must be presented. Valid through 11/5/19 while supplies last. Limit 1 FREE GIFT per customer per day.

ZURICH **SUPER COUPON**

OBD2 CODE READER WITH ABS/SRS/FixAssist® ZR13

Customer Rating ★★★★★

NOW \$119.99

SAVE \$158 **\$109.99**

COMPARE TO Snap-on BLUE-POINT \$338
ITEM 63806
MODEL: EECR3A

72063921

Limit 1 - Coupon valid through 11/5/19

BRAUN **SUPER COUPON**

845 LUMENS UNDERHOOD RECHARGEABLE WORK LIGHT

- Rechargeable lithium-ion battery

41-5/8"

Customer Rating ★★★★★

NOW \$34.99

SAVE \$74 **\$44.99**

COMPARE TO BAYCO \$109.12
ITEM 63990
MODEL: SLR-2120

72064579

Limit 1 - Coupon valid through 11/5/19

PITTSBURGH **SUPER COUPON**

1000 LB. CAPACITY STEEL MOTORCYCLE LIFT

- Lift range: 7" to 29-1/2"
- Weights 269 lbs.

NOW \$349.99

SAVE \$480 **\$449.99**

COMPARE TO DIRECT-LIFT \$829.99
ITEM 69904/68892 shown

72072073

Limit 1 - Coupon valid through 11/5/19

HaulMaster **SUPER COUPON**

18" x 12" MOVER'S DOLLY

- 1000 lb. capacity

Customer Rating ★★★★★

NOW \$7.99

SAVE \$10.99 **\$10.99**

COMPARE TO BUFFALO TOOLS \$22.99
ITEM 60497/61899/63095/63096/63097/63098 shown

72074933

Limit 1 - Coupon valid through 11/5/19

SUPER COUPON

20% OFF

ANY SINGLE ITEM*

72059733

Limit 1 coupon per customer per day. Save 20% on any 1 item purchased. *Cannot be used with other discount, coupon or any of the following items or brands: Inside Track Club membership, Extended Service Plan, gift card, open box item, 3 day Parking Lot Sale item, compressors, floor jacks, sales, saw mills, storage cabinets, chests or carts, trailers, trencher/backhoe, welders, Admiral, Ames, Bauer, Cobra, CoverPro, Daytona, Diamondback, Earthquake, Fischer, Hercules, Icon, Jupiter, Lynox, Poulan, Predator, Tailgator, Viking, Vulcan, Zurich. Not valid on prior purchases. Non-transferable. Original coupon must be presented. Valid through 11/5/19.

DAYTONA **SUPER COUPON**

PROFESSIONAL 3 TON SUPER DUTY STEEL JACK

- Lifts from 3-3/4" to 23-1/8"
- Weights 104 lbs.

Customer Rating ★★★★★

NOW \$189.99

SAVE \$536 **\$209.99**

COMPARE TO SNAP-ON \$726.25
ITEM 63183
MODEL: FJ200

72069327

Limit 1 - Coupon valid through 11/5/19

SUPER COUPON

HEAVY DUTY FOLDABLE ALUMINUM SPORTS CHAIR

NOW \$19.99

SAVE 50% **\$29.99**

COMPARE TO COLEMAN \$39.99
ITEM 62314/63066/66383 shown

72072961

Limit 1 - Coupon valid through 11/5/19

COVERPRO **SUPER COUPON**

10 FT. x 17 FT. PORTABLE GARAGE

Customer Rating ★★★★★

NOW \$169.99

SAVE \$120 **\$109.99**

COMPARE TO SHELTER LOGIC \$290.75
ITEM 62859/63055/62860 shown

72077510

Limit 1 - Coupon valid through 11/5/19

NEW U.S. GENERAL **SUPER COUPON**

72" x 22" TRIPLE BANK EXTRA DEEP CABINETS

Customer Rating ★★★★★

29,500 cu. in. of storage
6,600 lb. capacity
Weights 528 lbs.

YOUR CHOICE OF COLOR

NOW \$999.99

SAVE \$5,990 **\$1199.99**

COMPARE TO SNAP-ON \$6,999
MODEL: KRA2432P80

Item 64094, 64093, 64167, 56116, 56117, 56118

72060184

Limit 1 - Coupon valid through 11/5/19

GOOD **SUPER COUPON** **BETTER**

CENTRAL PNEUMATIC **McGRAW**

21 GALLON OIL-LUBE AIR COMPRESSOR

125 PSI

Customer Rating ★★★★★

125 PSI
STANDARD LIFE
STANDARD, 90 dBA
STANDARD RUN TIME
STANDARD OIL-LUBE MOTOR

NOW \$159.99

SAVE \$79 **\$179.99**

Item 61454/69091
62803/63635
67847 shown

72071207

Limit 1 - Coupon valid through 11/5/19

20 GALLON OIL-LUBE AIR COMPRESSOR

135 PSI

Customer Rating ★★★★★

135 PSI
2X LIFE
25% QUIETER
27% MORE RUN TIME
SUPERIOR CONSTRUCTION OIL-LUBE MOTOR

NOW \$169.99

SAVE \$80 **\$249.99**

Item 56241
64857 shown

72071254

Limit 1 - Coupon valid through 11/5/19

CENTRAL PNEUMATIC **SUPER COUPON**

1/4" AIR ANGLE DIE GRINDER

Customer Rating ★★★★★

NOW \$9.99

SAVE 80% **\$12.99**

COMPARE TO HUSKY \$49.98
ITEM 93088/62439/32046 shown

72073693

Limit 1 - Coupon valid through 11/5/19

PITTSBURGH **SUPER COUPON**

PNEUMATIC ADJUSTABLE ROLLER SEAT

- 300 lb. capacity

Customer Rating ★★★★★

NOW \$19.99

SAVE 71% **\$26.99**

COMPARE TO DURALAST \$69.99
ITEM 61160/61896/63456/46319 shown

72074794

Limit 1 - Coupon valid through 11/5/19

HaulMaster **SUPER COUPON**

3/8" x 14 FT. GRADE 43 TOWING CHAIN

- 5400 lb. capacity

Customer Rating ★★★★★

NOW \$199.99

SAVE \$64.99 **\$299.99**

COMPARE TO MIBRO \$64.99
ITEM 40462/60658/97711 shown

72078079

Limit 1 - Coupon valid through 11/5/19

PREDATOR **SUPER COUPON**

6.5 HP (212 CC) OHV HORIZONTAL SHAFT GAS ENGINE

Customer Rating ★★★★★

NOW \$99.99

SAVE \$230 **\$119.99**

COMPARE TO HONDA \$329.99
ITEM 60363/69730
ITEM 69727 shown
CALIFORNIA ONLY

72080295

Limit 1 - Coupon valid through 11/5/19

BETTER **TITANIUM** **SUPER COUPON**

UNLIMITED 200™ PROFESSIONAL MULTI-PROCESS WELDER

Customer Rating ★★★★★

NOW \$649.99

SAVE \$252 **\$699.99**

COMPARE TO ESAB \$902.64
MODEL: W1003141

ITEM 64806

72081654

Limit 1 - Coupon valid through 11/5/19

PITTSBURGH **SUPER COUPON**

1 TON CAPACITY FOLDABLE SHOP CRANE

- Boom extends from 36-1/4" to 50-1/4"
- Crane height adjusts from 82" to 94"

Customer Rating ★★★★★

NOW \$129.99

SAVE \$120 **\$179.99**

COMPARE TO IRONTON \$249.99
MODEL: 46218

ITEM 61858/69512/69445 shown

72090033

Limit 1 - Coupon valid through 11/5/19

CENTECH **SUPER COUPON**

AUTOMATIC BATTERY FLOAT CHARGER

Customer Rating ★★★★★

NOW \$4.99

SAVE 83% **\$9.99**

COMPARE TO SCHUMACHER ELECTRIC \$30.41
MODEL: SC1

ITEM 69955/64284/42292 shown

72096743

Limit 1 - Coupon valid through 11/5/19

Bauer **SUPER COUPON**

10 AMP DEEP CUT VARIABLE SPEED BAND SAW KIT

Customer Rating ★★★★★

NOW \$99.99

SAVE \$169 **\$139.99**

COMPARE TO DEWALT \$269.99
MODEL: DW10120

ITEM 64194
63763/63444 shown

72187467

Limit 1 - Coupon valid through 11/5/19

BEST **VULCAN** **SUPER COUPON**

OMNIPRO™ 220 INDUSTRIAL MULTI-PROCESS WELDER

Customer Rating ★★★★★

NOW \$879.99

SAVE \$552 **\$949.99**

COMPARE TO LINCOLN ELECTRIC \$1,432
MODEL: K3963-1

ITEM 63621

72083697

Limit 1 - Coupon valid through 11/5/19

BRAUN **SUPER COUPON**

5000 LUMENS LED HANGING SHOP LIGHT

Customer Rating ★★★★★

NOW \$19.99

SAVE 57% **\$47**

COMPARE TO INOLOD \$47
MODEL: SN1288-12

ITEM 64410

72094412

Limit 1 - Coupon valid through 11/5/19

SUPER COUPON

TWO TIER EASY-STORE STEP LADDER

- 225 lb. capacity

Customer Rating ★★★★★

NOW \$19.99

SAVE 40% **\$29.99**

COMPARE TO WERNER \$33.88
MODEL: S322A-1

ITEM 67514

72098075

Limit 1 - Coupon valid through 11/5/19

KRAUSE & BECKER **SUPER COUPON**

AIRLESS PAINT SPRAYER KIT

Customer Rating ★★★★★

NOW \$169.99

SAVE \$214.99 **\$299.99**

COMPARE TO GRACO \$299.99
MODEL: 262900

ITEM 68001/62915/60600 shown

72103242

Limit 1 - Coupon valid through 11/5/19

drill master **SUPER COUPON**

1500 WATT DUAL TEMPERATURE HEAT GUN (572°/1112°)

Customer Rating ★★★★★

NOW \$9.99

SAVE 64% **\$14.99**

COMPARE TO BLACK+DECKER \$28.06
MODEL: H01300

ITEM 35776/62340/62546/63104/96289 shown

72084395

Limit 1 - Coupon valid through 11/5/19

PITTSBURGH **SUPER COUPON**

3 TON HEAVY DUTY STEEL JACK STANDS

- Adjusts from 11-3/4" to 16-3/4"

Customer Rating ★★★★★

NOW \$18.99

SAVE 45% **\$23.99**

COMPARE TO TORIN JACK \$34.99
MODEL: 1007102

ITEM 38846/69597/62392/61196 shown

72087218

Limit 1 - Coupon valid through 11/5/19

CHICAGO ELECTRIC **SUPER COUPON**

STANDARD AUTO-DARKENING WELDING HELMET

NOW \$34.99

SAVE 56% **\$44.99**

COMPARE TO KOBALT \$79.99
MODEL: SDV-A13

ITEM 67618
61611/56356/46092 shown

72095550

Limit 1 - Coupon valid through 11/5/19

PITTSBURGH **SUPER COUPON**

LOW-PROFILE CREEPER

- 300 lb. capacity

Customer Rating ★★★★★

NOW \$19.99

SAVE 55% **\$29.99**

COMPARE TO POWER TORQUE \$44.99
MODEL: GM40300

ITEM 63371/63424/64169/63372 shown

72099499

Limit 1 - Coupon valid through 11/5/19

GENERAL MACHINERY **SUPER COUPON**

20 TON SHOP PRESS

Customer Rating ★★★★★

NOW \$144.99

SAVE \$235 **\$189.99**

COMPARE TO STRONGWAY \$379.99
MODEL: 46250

ITEM 32879/60603 shown

72105075

Limit 1 - Coupon valid through 11/5/19

*Original coupon only. No use on prior purchases after 30 days from original purchase or without original receipt. Valid through 11/5/19.

At Harbor Freight Tools, the "Compare to" price means that the specified comparison, which is an item with the same or similar function, was advertised for sale at or above the "Compare to" price by another national retailer in the U.S. within the past 90 days. Prices advertised by others may vary by location. No other meaning of "Compare to" should be implied. For more information, go to HarborFreight.com or see store associate.

Grant's SUPER COUPON

12" x 12" MICROFIBER CLEANING CLOTHS - PACK OF 4

Customer Rating: ★★★★★

SAVE 80% **NOW \$1.99**

COMPARE TO PROELITE MODEL: 887400 \$5.99

ITEM 63358/63925/63363 shown

72106880

LIMIT 4 - Coupon valid through 11/5/19

CENTRAL PNEUMATIC SUPER COUPON

29 GALLON, 150 PSI CAST IRON VERTICAL OIL-LUBE AIR COMPRESSOR

Air delivery: 5.9 SCFM @ 90 PSI

Customer Rating: ★★★★★

SAVE \$60 **NOW \$339.99**

COMPARE TO EASTWOOD MODEL: 31915 \$399.99

ITEM 62765/61489 shown

72107628

LIMIT 1 - Coupon valid through 11/5/19

CHICAGO ELECTRIC SUPER COUPON

14" 3.5 HP INDUSTRIAL HEAVY DUTY CHOP SAW

Customer Rating: ★★★★★

COMPARE TO DEWALT MODEL: 028715 \$229

SAVE \$149 **NOW \$99.99**

ITEM 62459/61481 shown

72110449

LIMIT 4 - Coupon valid through 11/5/19

HaulMaster SUPER COUPON

72" x 80" MOVING BLANKET

Customer Rating: ★★★★★

COMPARE TO BLUE HAWK MODEL: 72280 \$19.99

SAVE 70% **NOW \$5.99**

ITEM 69505/62418/66537 shown

72113937

LIMIT 5 - Coupon valid through 11/5/19

NEW U.S. GENERAL SUPER COUPON

30", 5 DRAWER MECHANIC'S CARTS

15,000 cu. in. of storage
700 lb. capacity
Weights 139 lbs.

Customer Rating: ★★★★★

COMPARE TO K TOOL MODEL: KTI63094 \$151.42

SAVE \$840 **NOW \$229.99**

ITEM 56429, 64031, 64033, 64061, 64721, 64722, 64720 shown

72134420

LIMIT 1 - Coupon valid through 11/5/19

PITTSBURGH SUPER COUPON

RAPID PUMP® 1.5 TON LIGHTWEIGHT ALUMINUM FLOOR JACK

Weights 34 lbs.

Customer Rating: ★★★★★

COMPARE TO K TOOL MODEL: KTI63094 \$151.42

SAVE \$91 **NOW \$59.99**

ITEM 64545/64552, 64832/64980/62160/62516/60569 shown

72136209

LIMIT 2 - Coupon valid through 11/5/19

PREDATOR SUPER COUPON

3500 WATT SUPER QUIET INVERTER GENERATOR

11 hour run time

Customer Rating: ★★★★★

COMPARE TO HONDA MODEL: EG00051A \$2,019

SAVE \$1,319 **NOW \$699.99**

ITEM 63584 shown

72138137

LIMIT 1 - Coupon valid through 11/5/19

CHICAGO ELECTRIC SUPER COUPON

12" DUAL-BEVEL SLIDING COMPOUND MITER SAW

Laser guide

Customer Rating: ★★★★★

COMPARE TO PROFESSIONAL WOODWORKER MODEL: 9637 \$229.99

SAVE \$89 **NOW \$139.99**

ITEM 69684/61776/61970/56597/61969 shown

72114042

LIMIT 5 - Coupon valid through 11/5/19

PITTSBURGH SUPER COUPON

32 PIECE SCREWDRIVER SET

LIFETIME WARRANTY

Customer Rating: ★★★★★

COMPARE TO PERFORMAX MODEL: 48201 \$31.97

SAVE 81% **NOW \$5.99**

ITEM 61259/90764 shown

72114071

LIMIT 4 - Coupon valid through 11/5/19

PITTSBURGH SUPER COUPON

1/2" DRIVE 25" BREAKER BAR

Chrome vanadium steel construction
Head swivels 180°
Polished finish

Customer Rating: ★★★★★

COMPARE TO DURALAST MODEL: 72-121 \$23.99

SAVE 62% **NOW \$8.99**

ITEM 60819/67933 shown

72114327

LIMIT 3 - Coupon valid through 11/5/19

VULCAN SUPER COUPON

COMMERCIAL QUALITY HEAVY DUTY WELDING STORAGE CABINET

Welder, equipment and supplies sold separately.

Customer Rating: ★★★★★

COMPARE TO BLACKSTONE MODEL: 80383 \$491.29

SAVE \$231 **NOW \$259.99**

ITEM 63179 shown

72120108

LIMIT 1 - Coupon valid through 11/5/19

CENTRAL PNEUMATIC SUPER COUPON

40 LB. CAPACITY FLOOR BLAST CABINET

Customer Rating: ★★★★★

COMPARE TO SHOP TUFF MODEL: 47187 \$249.99

SAVE \$110 **NOW \$139.99**

ITEM 62144/68893 shown

72138253

LIMIT 1 - Coupon valid through 11/5/19

WARRIOR SUPER COUPON

3 PIECE TITANIUM HIGH SPEED STEEL STEP BITS

Drill 28 hole sizes from 1/8" to 3/4"

Customer Rating: ★★★★★

COMPARE TO IRWIN MODEL: 1500PKSM \$59.98

SAVE 85% **NOW \$8.99**

ITEM 69087/60379/91616 shown

72139214

LIMIT 5 - Coupon valid through 11/5/19

Diablo SUPER COUPON

3/8" x 50 FT. INDUSTRIAL GRADE RUBBER AIR HOSE

Customer Rating: ★★★★★

COMPARE TO GOODYEAR MODEL: 12965 \$29.82

SAVE 36% **NOW \$18.99**

ITEM 69580/61339/62884/62890 shown

72141103

LIMIT 3 - Coupon valid through 11/5/19

SUPER COUPON

200 LUMENS LED SUPER BRIGHT FLIP LIGHT

Wireless, tool-free and easy installation

Customer Rating: ★★★★★

COMPARE TO PROMIER MODEL: SW-SWIT-CH-1224 \$4.99

SAVE 40% **NOW \$2.99**

ITEM 64189/64723/63922 shown

72141145

LIMIT 3 - Coupon valid through 11/5/19

SUPER COUPON

SOLAR ROPE LIGHT

16 ft. of LED lamps

Customer Rating: ★★★★★

COMPARE TO HAMPTON BAY MODEL: 84130 \$32.97

SAVE 72% **NOW \$8.99**

ITEM 62533/63941/64625/68353 shown

72121211

LIMIT 6 - Coupon valid through 11/5/19

PITTSBURGH SUPER COUPON

4" MAGNETIC PARTS HOLDER

Customer Rating: ★★★★★

COMPARE TO TITAN MODEL: 11194 \$5.99

SAVE 78% **NOW \$1.29**

ITEM 62535/90566 shown

72121524

LIMIT 4 - Coupon valid through 11/5/19

TAILGATOR SUPER COUPON

900 MAX. STARTING/700 RUNNING WATTS 2 HP (63 CC) 2 CYCLE GAS GENERATOR

5 hour run time @ 50% capacity

Customer Rating: ★★★★★

COMPARE TO POWERSMART MODEL: P550 \$126.10

SAVE \$36 **NOW \$89.99**

ITEM 63024/63025 shown

72121811

LIMIT 3 - Coupon valid through 11/5/19

PITTSBURGH SUPER COUPON

40 PIECE, 3/8" DRIVE SAE AND METRIC SOCKET SET

Customer Rating: ★★★★★

COMPARE TO CRAFTSMAN MODEL: CMHT12018 \$49.98

SAVE 92% **NOW \$3.99**

ITEM 47902/975/61328/63015/62843 shown

72122975

LIMIT 4 - Coupon valid through 11/5/19

HaulMaster SUPER COUPON

4 PIECE, 1" x 15 FT. RATCHETING TIE DOWNS

400 lb. working load

Customer Rating: ★★★★★

COMPARE TO KEEPER MODEL: 5905 \$22.80

SAVE 69% **NOW \$6.99**

ITEM 63094/60405, 63056/63057/63150/56668/61524 shown

72143453

LIMIT 4 - Coupon valid through 11/5/19

CHICAGO ELECTRIC SUPER COUPON

125 AMP FLUX-CORE WELDER

EVERYTHING YOU NEED TO WELD

Customer Rating: ★★★★★

COMPARE TO IRONTON MODEL: 45433 \$179.99

SAVE \$80 **NOW \$99.99**

ITEM 63583/63582 shown

72145738

LIMIT 2 - Coupon valid through 11/5/19

PITTSBURGH SUPER COUPON

5 PIECE TRIM AND MOLDING TOOL SET

Customer Rating: ★★★★★

COMPARE TO OEM MODEL: 25314 \$17.99

SAVE 66% **NOW \$5.99**

ITEM 64126/67021 shown

72146320

LIMIT 5 - Coupon valid through 11/5/19

CENTECH SUPER COUPON

2/10/50 AMP, 12 VOLT BATTERY CHARGER AND ENGINE STARTER

Customer Rating: ★★★★★

COMPARE TO SCHUMACHER ELECTRIC MODEL: SE-1250 \$59.77

SAVE 49% **NOW \$29.99**

ITEM 60501, 3418/66783/60653 shown

72146522

LIMIT 3 - Coupon valid through 11/5/19

U.S. GENERAL SUPER COUPON

30", 4 DRAWER TECH CART

12,600 cu. in. of storage
580 lb. capacity

Customer Rating: ★★★★★

COMPARE TO SNAP-ON MODEL: HNC1078PC \$880

SAVE \$760 **NOW \$119.99**

ITEM 56390/56386, 56391/56387/56392, 56393/56394/56418, 64096 shown

72125873

LIMIT 1 - Coupon valid through 11/5/19

BUNKER HILL SECURITY SUPER COUPON

WIRELESS SECURITY ALERT SYSTEM

Customer Rating: ★★★★★

COMPARE TO FIRST ALERT MODEL: SFA680 \$32.99

SAVE 69% **NOW \$9.99**

ITEM 61910/62447/93068 shown

72127651

LIMIT 5 - Coupon valid through 11/5/19

CHICAGO ELECTRIC SUPER COUPON

6" VARIABLE SPEED DUAL ACTION POLISHER

Customer Rating: ★★★★★

COMPARE TO PORTER-CABLE MODEL: 7424XP \$79.99

SAVE \$59 **NOW \$19.99**

ITEM 64528, 64529/62862/69924 shown

72128882

LIMIT 2 - Coupon valid through 11/5/19

BRAUN SUPER COUPON

390 LUMENS MAGNETIC SLIM BAR LED WORK LIGHT

Customer Rating: ★★★★★

COMPARE TO ASTRO MODEL: 40SL \$55.12

SAVE 54% **NOW \$24.99**

ITEM 56248/56329/63958 shown

10123590

LIMIT 2 - Coupon valid through 11/5/19

SUPER COUPON

FULL-MOTION TV WALL MOUNT

Fits most flat screen TVs from 37" to 80"

Customer Rating: ★★★★★

COMPARE TO ROCKETFISH MODEL: RF-HVTVM170C \$199.99

SAVE \$49.99 **NOW \$149.99**

ITEM 64037/63155 shown

72146617

LIMIT 2 - Coupon valid through 11/5/19

PITTSBURGH SUPER COUPON

6" DIGITAL CALIPER

Includes two 1.5V SR44 button cell batteries.

Customer Rating: ★★★★★

COMPARE TO HUSKY MODEL: HCW10PCS-6E \$29.97

SAVE 66% **NOW \$9.99**

ITEM 63711/98563/61585/62387/47257 shown

72147665

LIMIT 5 - Coupon valid through 11/5/19

PITTSBURGH SUPER COUPON

1000 LB. CAPACITY ENGINE STAND

Customer Rating: ★★★★★

COMPARE TO IRONTON MODEL: 47033 \$99.99

SAVE \$52 **NOW \$47.99**

ITEM 69886/69520 shown

72148309

LIMIT 3 - Coupon valid through 11/5/19

PITTSBURGH SUPER COUPON

9 PIECE FULLY POLISHED COMBINATION WRENCH SETS

Customer Rating: ★★★★★

COMPARE TO HUSKY MODEL: HCW10PCS-6E \$7.99

SAVE 66% **NOW \$5.99**

ITEM 42305 shown

72149138

LIMIT 4 - Coupon valid through 11/5/19

CENTRAL PNEUMATIC SUPER COUPON

3 PIECE DUAL CHUCK TIRE INFLATOR SET WITH HOSE

Customer Rating: ★★★★★

COMPARE TO KOBALT MODEL: SOV-AR194 \$19.48

SAVE 74% **NOW \$4.99**

ITEM 61380/68272 shown

72130934

LIMIT 5 - Coupon valid through 11/5/19

CENTRAL MACHINERY SUPER COUPON

4" x 36" BELT 6" DISC SANDER

Customer Rating: ★★★★★

COMPARE TO RYOBI MODEL: SD4601G \$149

SAVE \$84 **NOW \$64.99**

ITEM 5154/64778/97181 shown

72131160

LIMIT 5 - Coupon valid through 11/5/19

CENTRAL PNEUMATIC SUPER COUPON

20 OZ. GRAVITY FEED AIR SPRAY GUN

1.4mm tip included

Customer Rating: ★★★★★

COMPARE TO KOBALT MODEL: SOV-AR6RTZ \$49.99

SAVE 80% **NOW \$9.99**

ITEM 67181/62300/47016 shown

72132301

LIMIT 3 - Coupon valid through 11/5/19

ASAP SUPER COUPON

11" CABLE TIES PACK OF 100

Customer Rating: ★★★★★

COMPARE TO UTILITECH MODEL: SOV-UT25 \$10.85

SAVE 81% **NOW \$2.00**

ITEM 34637 shown

72134211

LIMIT 4 - Coupon valid through 11/5/19

HaulMaster SUPER COUPON

2" x 20 FT. TOW STRAP

2800 lb. working load

Customer Rating: ★★★★★

COMPARE TO HIGHLAND MODEL: 1018000 \$15.99

SAVE 43% **NOW \$8.99**

ITEM 60675/61943/36612 shown

72149209

LIMIT 4 - Coupon valid through 11/5/19

Bauer SUPER COUPON

20 VOLT LITHIUM CORDLESS 1/2" COMPACT DRILL/DRIVER KIT

450 in. lbs. of torque
1.5 amp hour battery
Weights 3.4 lbs.

Customer Rating: ★★★★★

COMPARE TO RYOBI MODEL: P1011 \$59.99

SAVE \$39 **NOW \$20.99**

ITEM 64754, 63531 shown

72154409

LIMIT 2 - Coupon valid through 11/5/19

HaulMaster SUPER COUPON

TRIPLE BALL TRAILER HITCH

Customer Rating: ★★★★★

COMPARE TO REESE TOWPOWER MODEL: 101179799 \$59.99

SAVE 66% **NOW \$19.99**

ITEM 64311, 64286/61914 shown

72154495

LIMIT 5 - Coupon valid through 11/5/19

WARRIOR SUPER COUPON

6" FOAM PADS

ORANGE COMPOUND CUTTING

Customer Rating: ★★★★★

COMPARE TO PORTER-CABLE MODEL: 54745 \$12.33

SAVE 67% **NOW \$3.99**

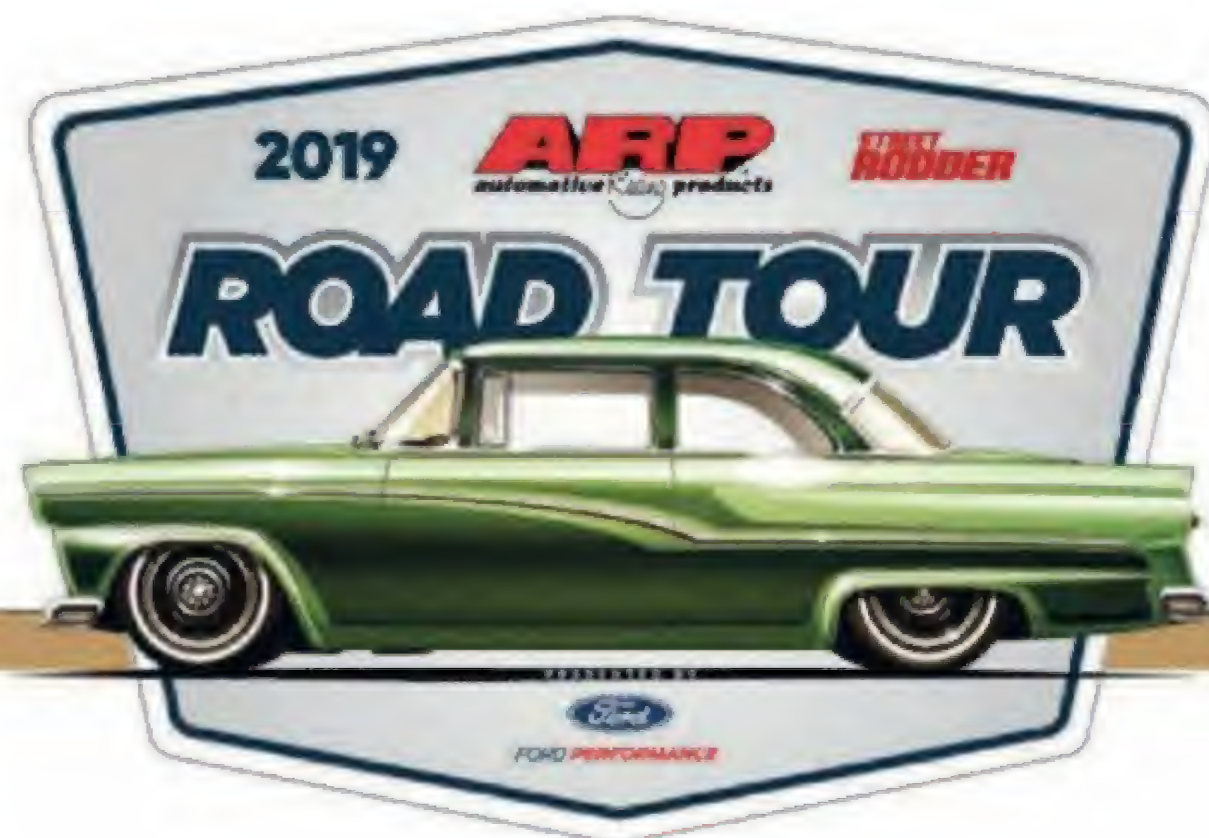
ITEM 60311/63291, 60309, 60310 shown

72160082

LIMIT 5 - Coupon valid through 11/5/19

ON THE ROAD

Jerry Dixey



The AMSOIL INC. Woodward Dream Cruise Week

♦ Many street rod events are as well known by the cities where they're located as by their official name—Louisville, for example. But I can only think of one event that is known by the name of the street where it takes place. Of course it is one big street and one very big event.



■ You have to go to the Henry Ford Museum and Greenfield Village when you visit the Motor City. The AMSOIL INC. Woodward Road Tour will have a perfect spot to view the famous Dream Cruise.

Woodward Avenue in Michigan runs 22 miles northwest from downtown Detroit to Pontiac. In the '60s, when muscle cars ruled the road, Woodward was the road they ruled the most. Local rodders remember the Big Three's design and engineering teams bringing out their prototype factory race cars to "test the waters." Once a year in August that car culture scene is recreated with the Woodward Dream Cruise.

Officially the Dream Cruise is held on one Saturday. Unofficially, the local rodders start getting ready for "Woodward" as soon as the snow clears in the spring. The event has been on the *STREET RODDER* Road Tour schedule for many years. We

noticed that the fun is in full swing during the weeks before the official Saturday event, so for the last 10 years we have spent the entire previous week in the Motor City visiting shops, museums, private car collections, and places of historic significance.

This year AMSOIL INC. is the sponsor of our Woodward Week and we have some great activities planned. On Monday and Tuesday we will be in Dearborn, visiting Motor City Solutions, American Speed, Kalitta Air (as in Connie Kalitta), and the Yankee Air Museum. We will spend an entire day at The Henry Ford, which includes the Henry Ford Museum and Greenfield Village.

On Wednesday, we'll head west to Michigan Speedway and visit the fantastic Gilmore Auto Museum just north of Kalamazoo.

For the rest of the week we will be headquartered in Madison Heights, the perfect location for the activities on Woodward Avenue. Thursday we will visit some private collections and rod shops in the area. Starting Friday, we will have a special parking area and hospitality tent in Memorial Park in Royal Oak near the center of Dream Cruise activities. Saturday is the official Woodward Dream Cruise day, and AMSOIL INC. Woodward Week participants will be in the middle of the action.

For more information, as well as registration for the tour, visit <https://www.hotrod.com/events/street-rodder-road-tour/>, or call the Road Tour Hotline at (800) 664-1362 for the latest updates. See our entire ARP/*STREET RODDER* Road Tour schedule on page 75.

THE CHEVROLET PERFORMANCE SUMMER BLOCK PARTY ENGINEERED TO PERFORM

\$100 OR \$200 MAIL-IN REBATE
ON THE PURCHASE OF ALL CHEVROLET PERFORMANCE BLOCKS.
SEE WEBSITE FOR DETAILS.*

\$25 OR \$50 MAIL-IN REBATE
ON THE PURCHASE OF ALL CHEVROLET PERFORMANCE HEADS.
SEE WEBSITE FOR DETAILS.*



Summer is on. We know you can take the heat. And now you can push your passion past the limit with factory-built blocks and heads designed, engineered, tested, and backed by Chevrolet Performance.

SHOP NOW AT CHEVROLETPERFORMANCE.COM/OFFERS

*See participating U.S. dealer or authorized Chevrolet Performance Powertrain Reseller for details and rebate form, which must be postmarked by 10/31/19. Limit 3 rebates per mailing address. Rebate form and details available at chevrolet.com/performance/offers. Allow 6 to 8 weeks for delivery of debit card. Offer valid 7/1/19 to 9/30/19.

©2019 General Motors. All rights reserved. The marks appearing in this ad are the trademarks or service marks of GM, its subsidiaries, affiliates, or licensors.



PERFORMANCE
VEHICLES / PARTS / RACING

FOR STARTERS



Brian Brennan

Do You Drive Your Hot Rod?

♦To me there's no need to own a hot rod if you aren't going to drive it. I get it, to many it's the build that means everything and driving is secondary. (I'm not talking about hot rods that are dragged to an indoor or outdoor show because that's a show car and not a hot rod.)

For starters, to me it's all about the drive. Anyone with talent and perseverance can build a hot rod but it takes genuine toughness to drive one. And I am not talking about throwing your hot rod in the back of a toy hauler and towing with the latest in heavy-duty truck hardware. That's not driving your hot rod that's driving your truck.

Back in the '70s the urge overcame many a rodder to leave the safe confines of the 100-mile radius from one's garage and venture onto the open road and all points east, west, north, or south. I first started driving my hot rods back in the '60s but it wasn't until the mid '70s when I mustered up the courage to venture to the "ends of the earth," or so I thought. My first long-distance drive in a hot rod was to the Nats South back in the days when it was held in Winston-Salem, North Carolina.

I can remember the excitement leading up to our first cross-country drive with the late Jim Ewing of Super Bell Axle fame. There were minor hiccups and one major: broke an engine mount near the nuclear powerplant in Russellville, Arkansas. In a moment of exploration, we opted to deviate from Interstate 40 near Fort Smith, Arkansas, and check



out the local scenery. It wasn't long before we found some good ol' hot rodders who jumped in and saved our sagging backsides. When all was said and done our cross-country journey was, for the most part, mechanically uneventful. Even the breakdowns were turned into adventures and to this day make for some great storytelling.

Over the course of the next seven years I hit my stride and made 10-plus cross-country trips that took in regional and national events from the deep south to the central

U.S. For good measure there were drives to Washington and Detroit as I became more and more confident. All it took was some pre-planning, careful packing (anticipate the part that will break and have a spare, which never worked out for me), and a fist full of dollar bills and it was out onto the open road. Back then we didn't make hotel reservations. We just

... not from distant lands. Maybe it's a sign of the times and with the pace of today's life making it more restrictive to have the time to take the time. Maybe it's budgets, as I am sure we have all noticed it's a great deal more expensive to travel. Lastly, there's a safety issue. Not only for our cars, should something happen, but also for us. Yes, I am sure someone somewhere has uttered the words, "The times, they are a changin'."

To date I have logged in 14 hot rod-powered cross-country trips, oftentimes with several others. There's definitely safety in numbers but you will be amazed at how much more creativity there is in solving a problem when there are three of you rather than one of you! I have also managed several trips to the Nats and back by myself. Yes, it does get a bit lonely but I must admit I liked traveling on my own schedule, at my own speed, and I believe the quiet time did wonders for me.

Well, to me, driving is the real deal and I am perfectly happy keeping it that way. I just need to get out from behind this keyboard and walk out to the garage and fire up the ol' highboy and head for parts east.

B. Brennan

Brian Brennan
Network Director/Editor
facebook.com/brian.brennan.710

Classic instruments' Corvettes



1963-'67 Direct Fit Package

Features a 5" speedometer and tachometer, 2 1/8" Fuel (90ohm), water temperature, volt, and oil pressure gauges installed in a mounting plate and pre-wired. Includes standard GM sending units. Bezel not included.

Retro-fit

Maintain the nostalgic style of the original instruments, but upgrade to the latest all-electronic technology for maximum accuracy and reliability. Classic Instruments' Retro-fit clusters will work with any modern engines and transmissions.

Complete Custom

Change the color, add your logo, or create a completely custom concept from the ground up to provide the perfect finishing touch for any project.

Retro-fit and custom design services are priced on an individual basis. Please call us to get started!



INSTRUMENT
CUSTOMIZATION
UNIT



The finishing touch

CLASSIC INSTRUMENTS

800.668.9216 | classicinstruments.com | 826 Moll Drive, Boyne City, MI 49712

WWW.SOUTHERNRODS.COM



FREE FREIGHT ON ORDERS OVER \$150*

***Must mention ad for Free Freight Promotion! Phone sales Only!**

SRP Impala Wheels

We are proud to announce our new SRP brand Impala steering wheel. This 15" paintable steering wheel is the perfect fit for your ride. Fits all GM columns up to 1994. Includes horn kit. Bare Impala Wheel SRP-20003P **\$189.00** Gel Coat Impala Wheel SRP-20003 **\$279.99**



ONLY \$279.99



5 and 6 Gauge Mechanical Sets
Economical and great looking. 5 colors available. Come with all needed senders.
Six Gauge Set.....**\$235**
Five Gauge Set.....**\$199.99**
Add a speedometer cable for only....**\$25.00**



Hook it Up Special
2 Universal Joints and 24" of DD shaft.
NO WELDING REQUIRED
Kit for **\$99.95**
Universal Joints Each.....**\$49.95**



GPS Speed Sensor
Works with any brand of electric speedometer. Any transmission! **\$139.00**

CUSTOM TILT STEERING COLUMNS WITH GM WIRING

Plain Finish Floor Shift Tilt Column.....**\$229.99**
Chrome Finish Floor Shift Tilt Column.....**\$245.99**
Plain Finish Column Shift Tilt Column.....**\$239.99**
Chrome Finish Column Shift Tilt Column.....**\$255.99**
Adjustable Floor Mount..... **\$20.00**

COMPLETE \$1379.95



STARTING AT \$159

Steering Wheel Kits

From Polished Billet to Chrome. Custom to Resto. Check out our full line of steering wheels.



Comes complete with 11" Disc Brakes, 2" Drop Spindles, New Rack, and welds ground smooth on USA Crossmember. **MADE IN USA**
Add **\$110.00** for ALL NEW Power Steering Rack

FREE!



Hi-Po Hot Rod Heater

7" Heater can hook up to defrost or louvers. 7" wide, 3" deep, 8" high..... **\$139.95**

NEW 4 vent heater

10 1/2" wide, 8" deep, 4 3/4" high Only..... **\$169.95**

Trimline w/defrost

Under dash unit featuring Heat, A/C, Defrost Only **\$726**
COMPLETE KIT - Everything you Need!

MAXI I SMALL SIZE - HIGH OUTPUT

No Vacuum All Electric Featuring Heat, A/C, Defrost and Floor Heat and our exclusive 2-way electric shut-off water valve. Only **\$845**
8 1/4" Tall x 18 1/4" Wide x 9" Deep
COMPLETE KIT - Everything you Need!

MAXI II ALL NEW - ALL ELECTRIC

No Vacuum. This is our Hi-Performance Classic Truck and Car Heat, A/C, Defrost Kit **COMPLETE KIT - Everything you Need!** Only **\$865**

Superfrost Pro

Featuring Heat, A/C, Defrost and Floor Heat Perfect choice for budget builds. **\$755**
COMPLETE KIT - Everything you Need!

NEW Mini-Kooler

A/C Only Unit. Smallest A/C unit on the market! 10 1/2" wide, 8" deep, 4 3/4" high **\$279**
COMPLETE KIT - Everything you need only \$715

MADE IN USA

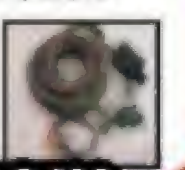


Rebel Wiring Kits

8 Circuit Harness **\$184.95**
14 Circuit Harness **\$210.95**
21 Circuit Harness **\$254.95**

Includes GM column and headlight plugs. Color coded and labeled, wires attached to fuse block.

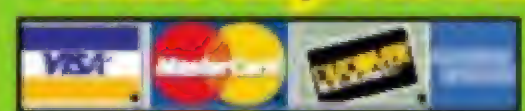
MADE IN USA



1-800-STRT-ROD or www.southernrods.com

Southern Rods & Parts 2125 Airport Rd., Greer, SC 29615

Orders Only: 800-787-8763 Tech Line: 864-848-0601 Fax: 864-801-3417



We can save you \$\$\$\$
Follow us on facebook

All Prices Plus Freight - We Ship USPS & UPS
Daily Prices are subject to change without notice.
© 2019 Southern Rods & Parts.

STREET RODDER

EDITORIAL

Network Content Director Douglas Glad
Network Director, Street Rod and Super Chevy Groups/Editor Brian Brennan, brian_brennan@motortrend.com
Senior Managing Editor Sarah Gonzales
Feature Editor Tim Bernsau, tim_bernsau@motortrend.com
Tech Editor John Gilbert, john_gilbert@motortrend.com
Tech Editor Rob Fortier, rob_fortier@motortrend.com
Contributing Tech Writer Ron Ceridono
Contributing Writer, East Coast Chuck Vranas
Contributors Rodney Bauman, Tommy Lee Byrd, Gerry Burger, Ron Covell, Jerry Dixey, Eric Geisert, Ken Gross, Barry Kluczyk, Robert McGaffin, Josh Mishler, Dale Moreau, Greg Sharp, Chris Shelton, Jeff Smith, Tim Sutton
Contributing Artists Bob Hovorka, Jeff Norwell, George Trosley
Web Content Editor Jordan Scott

DESIGN

Design Director Markas Platt, mplattd@enthusiastnetwork.com

STREET ROD GROUP ON THE WEB

streetrod.com classictrucks.com
Subscriber Services
USA: (800) 777-1849; International (386) 447-6385
streetrod@enthusiastnetwork.com
STREET RODDER
P.O. Box 420235, Palm Coast, FL 32142-0235

Please include name, address, and phone number on any inquiries.
Canada Post: Return undeliverable Canadian addresses to IMEX Global Solutions, P.O. Box 25542, London, ON N6C 6B2. Occasionally, our subscriber list is made available to reputable firms offering goods and services we believe would be of interest to our readers. If you prefer to be excluded, please send your current address label and note requesting to be excluded from these promotions to: TEN: Publishing Media, LLC, 831 S. Douglas St., El Segundo, CA 90245, Attn: Privacy Coordinator.

ADVERTISING INFORMATION

Call STREET RODDER Advertising Department at (949) 705-3100.

EDITORIAL CONTRIBUTIONS Welcomed but editors recommend that contributors query first. Contribution must be accompanied by return postage and we assume no responsibility for loss or damage thereto. Manuscripts must be typewritten on white paper, and all photographs must be accompanied by captions. Photo model releases required on all persons in photos. STREET RODDER reserves the right to use material at its discretion, and we reserve the right to edit material to meet our requirements. Upon publication, payment will be made at our current rate, and that said payment will cover author's and contributor's rights of the contribution. Contributor's act of mailing contribution shall constitute an express warranty that the material is original and no infringement on the rights of others. Mail contributions to: STREET RODDER Magazine, 1821 E. Dyer Rd., Ste. 150, Santa Ana, CA 92705. Phone (949) 705-3100, Fax (949) 705-3427.

RELATED PUBLICATIONS 4-Wheel & Off-Road, Automobile, Car Craft, Chevy High Performance, Classic Trucks, Diesel Power, Four Wheeler, Hot Rod, Hot Rod Deluxe, Jp, Lowrider, Mopar Muscle, MotorTrend, Muscle Car Review, Muscle Mustangs & Fast Fords, Mustang Monthly, Super Chevy, Super Street, Truck Trend, Truckin, and Vette.

BACK ISSUES

To order back issues, visit TENbackissues.com.

REPRINTS

For high-quality custom reprints and eprints, please contact the YGS Group at (800) 290-5460 or TENreprints@theygsgroup.com. Any submissions or contributions from readers shall be subject to and governed by TEN: Publishing Media's User Content Submission Terms and Conditions, which are posted at http://www.enthusiastnetwork.com/submissions/. This magazine is purchased by the buyer with the understanding that the information presented is from various sources from which there can be no warranty or responsibility by TEN: Publishing Media, LLC, or the publisher as to legality, completeness, and accuracy.

ADVERTISING

Associate General Manager Yasmin Fajatin
Eastern Sales Director Michael Essex, (863) 860-6023
Western Sales Director Scott Timberlake, (310) 531-5969
Advertising Operations Manager Monica Hernandez
Advertising Operations Coordinator Patricia Ludi
To advertise on this magazine's website, or on any of TEN: Publishing Media's other enthusiast sites, please contact us at AM-advertising@enthusiastnetwork.com.

WEST

Los Angeles
831 S. Douglas St. El Segundo, CA 90245
(310) 531-9900
Irvine
1821 E. Dyer Rd., Ste. 150 Santa Ana, CA 92705
(949) 705-3100

EAST

New York
850 Third Avenue, 6th Floor, New York, NY 10022
(212) 548-5555

NORTH

Detroit
4327 Delemere Ct. Royal Oak, MI 48073
(248) 594-5999

SOUTHEAST

(813) 675-3479

SOUTHWEST

Texas
(626) 695-5950

TEN: PUBLISHING MEDIA, LLC

Chairman Greg Mays
President Kevin Mullan
SVP, Editorial & Advertising Operations Amy Diamond
General Manager, Automotive Network Tim Foss
Senior Director, Finance Catherine Temkin

CONSUMER MARKETING, ENTHUSIAST MEDIA SUBSCRIPTION COMPANY, INC.

SVP, Circulation Tom Slater
VP, Retention & Operations Fulfillment Donald T. Robinson III
VP, Acquisition & Database Marketing Victoria Linehan
VP, Newsstand Retail Sales William Carter

MOTORTREND GROUP

President/General Manager Alex Wellen
Group SVP, Sales Eric Schwab
Head of Operations Jerry Solomon
Head of International & Business Development Francis Keeling
Head of Digital Product & Technology Argam DerHartunian
SVP, Digital Media Sales Jason Rice
SVP, Aftermarket Media Sales Matt Boice
SVP, Marketing Ryan Payne
SVP, Content & Editor-in-Chief Edward Loh
SVP, Content Strategy Aftermarket David Freiburger
VP, Product Pepper Chiavacci
VP, Finance/Controller Shilpa Joshi
VP, Social Media & Content Monetization Megan Neal
VP, Human Resources Charmaine Dantzier

TEN: PUBLISHING



ALL RIGHTS RESERVED • PRINTED IN THE USA
COPYRIGHT © 2019 TEN: PUBLISHING MEDIA, LLC.
The STREET RODDER trademark is a registered trademark of Motor Trend Group, LLC. Under license by TEN: Publishing Media, LLC.



BETTER QUALITY. BETTER PARTS. BETTER RESTORATIONS.

BUY THE BEST. INVEST IN YOUR DREAM.

Golden Star offers the best quality parts for your next build. We have decades of experience manufacturing the best fitting and highest quality sheet metal and restoration parts in the industry. We work with shops and builders to improve fit and quality, and to minimize body work expenses.

1955-57 CHEVY TAILGATES



TG13-55 1955-57 Wagon Tailgate Complete
TG13-551 1955-57 Nomad Tailgate Assembly
TG13-55HP.. 1955-57 Wagon Tailgate Hinges (pair)

1955-57 CHEVY GASSER WHEEL ARCHES



Welds to existing 55 Chevy quarter panels for a wider 10.7" slick tire. Designed for a 27" tire. Sold as a pair.
QP13-55WA..... 1955 Gasser Wheel Arch Openings

1955-57 CHEVY WAGON, NOMAD AND SEDAN DELIVERY TRUNK FLOORS



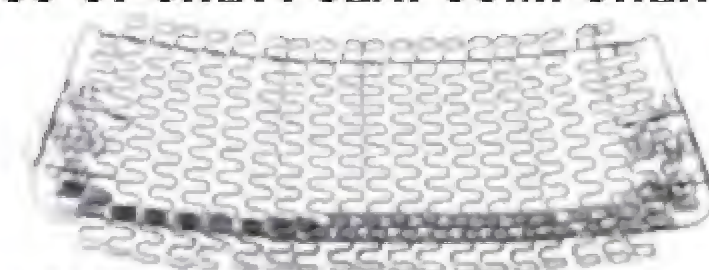
TF13-551C 55-57 Cargo Floor Complete w/o Ext
TF13-552C 55-57 Cargo Floor Complete with Ext
TF13-553C .. 55-57 Cargo Floor with Spare Tire Well

1955-57 CHEVY ROCKER PANELS



RP13-55L 1955 2-Dr Outer Rocker - Drivers
RP13-55R 1955 2-Dr Outer Rocker - Pass
RP13-56L 1956 2-Dr Outer Rocker - Drivers
RP13-56R 1956 2-Dr Outer Rocker - Pass
RP13-57L 1957 2-Dr Outer Rocker - Drivers
RP13-57R 1957 2-Dr Outer Rocker - Pass

1955-57 CHEVY SEAT COMPONENTS



SB13-55P 1955-56 2-Dr Front Seat Assembly
SB13-57FS 1957 Front Seat Bottom Springs
SB13-57RS 1957 Rear Seat Bottom Springs

1955 CHEVY FENDER ASSEMBLIES



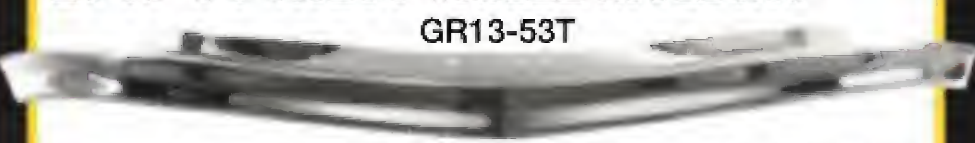
Assemblies include Fender, Inner Fender, Rear Extension & Splash Shield (No Trim Holes)
FE13-55LA 1955 Fender Assembly - Drivers
FE13-55RA 1955 Fender Assembly - Passenger

1955-57 CHEVY FILLER PANELS



GF13-55 1955 Front Filler Panel 3-pc Set
GF13-561 1956 Front Filler Panel
GF13-571 1957 Front Filler Panel

1949-54 CHEVY GRILLE MOLDING



GR13-49C... 49-50 Horizontal Center Grille Moulding
GR13-49L 49-50 Lower Grille Moulding
GR13-53L 1953 Chevy Lower Grille Moulding
GR13-53T 1953 Chevy Top Grille Moulding
GR13-54C 1954 Chevy Center Grille Moulding
GR13-54T 1954 Chevy Top Grille Moulding

- GREAT PRICING
- HUGE INVENTORY
- OE QUALITY & FITMENT
- INDUSTRY'S BEST FIT
- EXTENSIVE DEVELOPMENT
- FIRST-TO-MARKET NEW ITEMS

Golden Star

CLASSIC AUTO PARTS

ASK FOR US BY NAME AT YOUR FAVORITE RETAILER



www.GoldenStarAuto.com • 1-972-315-3758

WINDOW SHOPPER

John Gilbert



★Split-Window Style

Schott Wheels announced that its new Split-Window design “embodies both classic and dynamic style brought to the highest level of quality and innovation possible.” Like all of Schott’s Cover-Loc wheels, various center nut and knockoff options are available to render different aesthetics. They are designed and manufactured in-house with forged billet aluminum for lightweight strength and meticulously machined, hand polished, and ceramic painted with your choice of several custom ceramic color coatings. Hardware is included and each wheel is tailored to fit and optimized for the deepest lip possible.



•Schott Wheels (714) 891-7680 schottwheels.com

★Rod Bolt Stretch Checker

Premium-grade fastener manufacturer ARP has taken accuracy to the next level with the introduction of a digital stretch gauge that measures to the ten-thousandths. ARP’s new digital rod bolt stretch gauge has many important features, not the least of which is an easy-to-read digital display. Accurate readings are ensured through opposing ball-and-pin-type probes that center on the bolt. A uniquely designed billet aluminum handle makes for ease of operation. ARP’s digital rod bolt stretch gauge (PN 100-9943) comes in a handy carrying case.



•Automotive Racing Products (800) 826-3045 arp-bolts.com

★Brushless Adjustable Fuel Pump

Aeromotive’s new adjustable universal in-tank brushless fuel pumps offer the power and versatility demanded of fuel delivery systems in the high-performance market—from dedicated track cars to radical street machines. Adjustability is the name of the game for Aeromotive’s latest additions to its popular brushless fuel pump series. The fuel delivery experts at Aeromotive went to work creating all-new, adjustable-height, in-tank configurations of the company’s brushless fuel pump series that offers a more universal fit for a wider variety of fuel cells from 10-16 inches in depth.



•Aeromotive (913) 647-7300 aeromotiveinc.com

★Supercharger Plus Kits

TorqStorm announced belt-driven accessories to complement SBC, BBC, and LS kits. TorqStorm believes it has introduced “what is likely to be the industry’s first complete supercharger kits and accessories for Chevrolet small-, big-block, and LS engines.” Called “Plus,” these new kits introduce convenience, which includes a Sanden air conditioning compressor, Turn One power steering pump, and Powermaster alternator. Although Plus versions upgrade TorqStorm’s single supercharger kits, their twin systems have incorporated these accessories since their inception. They are available in natural alloy, black anodized, or with a micro-polished finish.



•TorqStorm Superchargers (616) 226-9476 torqstorm.com

•The publishing of products in Window Shopper is not an endorsement of these items by the STREET RODDER staff or by TEN: Publishing Media, LLC. This material is as represented by the manufacturer only; these products have not necessarily been used or tested by us. —Editor. To electronically submit material for your product, email brian_brennan@motortrend.com.

SPEC SERIES

WHAT IS IT? Simply put, SPEC is the most advanced, highest quality and budget friendly chassis and suspension system available. Taking advantage of the latest CNC chassis rail manufacturing and construction available today, we have engineered a new package unlike anything else available.

Everything you would expect from the Roadster Shop, besides the price!

CHASSIS WITH SUSPENSION: \$10,495

1960-87 C10 CHASSIS

Stock or Slammed, Bagged or Coilover



1967-69 CAMARO CHASSIS

Full frame with no cutting
Zero body mods needed



1964-72 FORD F100

Stock or Slammed, Bagged or Coilover



1955-57 CHEVY

100% bolt on with zero cutting or
body mods needed



1961-64 IMPALA

Eliminate the X frame with
minimal modification



1964-72 CHEVELLE

Strength, performance, and the
perfect stance



Tired of mis-matched, ‘bolt together’ components, only designed for a weak and twisted 30-50 year old frame, never intended for modern performance and horsepower?

Start with a completely engineered system as a solid foundation for the same cost and a fraction of the work.

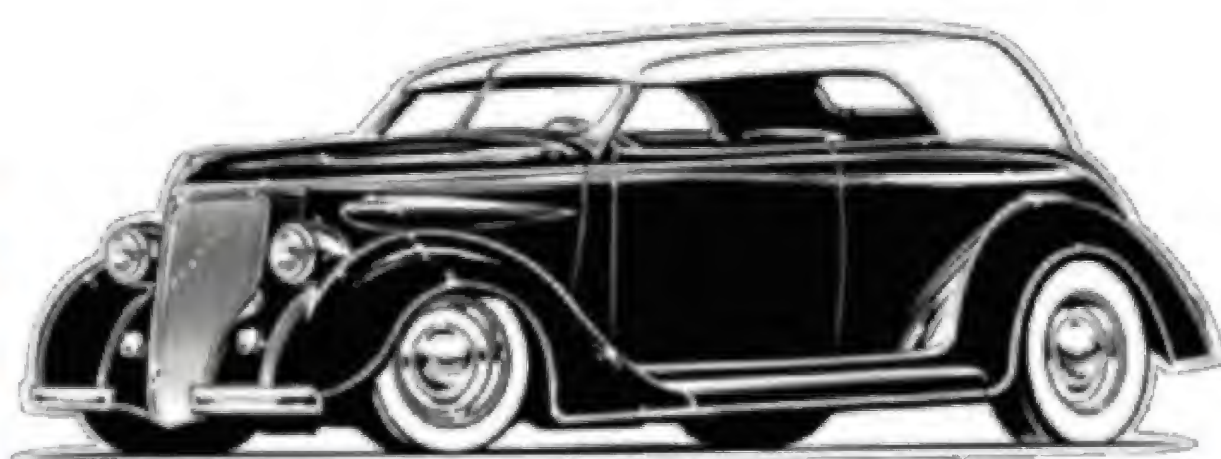
High-resolution 3D scanning has enabled the Roadster Shop to create an exact model of the original floor pan and undercarriage. Stock mounting points are utilized for a truly bolt-on application



847.949.7637
WWW.ROADSTERSHOP.COM



STREET CORNER



Tim Bernsau

TCI Engineering Turns 45 With a Big Prize

◆ In 1974, Ed Moss turned his passion into a thriving, classic car restoration business. Total Cost Involved Engineering started with a first-of-its-kind Ford Model A chassis. Now TCI Engineering manufactures chassis and suspension products for street rods, hot rods, trucks, and muscle cars from its 32,000-square-foot facility in Ontario, California. The company has earned numerous design and performance honors over the years, including the Manufacturer of the Year Award from SEMA-SRMA.

TCI Engineering is celebrating its 45th anniversary by giving away a complete chassis or suspension package. Online entry forms will be accepted until November 25. The winner will be drawn on December 2 and notified within 24 hours. The winner's choice of an Early



■ Ed Moss (far right) and the TCI chassis team way back when with an early Ford chassis.

Classic Car Chassis, Classic Truck Chassis, or Muscle Car Suspension will be shipped directly to them.

To enter the contest, and to see all rules and details, visit totalcostinvolved.com.

Slonaker Trophy Designed by Brockmeyer

◆ In the August issue, we announced the contest for the design of a new trophy for the Al Slonaker Memorial Award. The Slonaker Award is presented annually to the best non-roadster at the Grand National Roadster Show. RodShows.com, which owns the GNRS, has selected Eric Brockmeyer's design as the winning entrant.

STREET RODDER readers are familiar with Brockmeyer's work. His illustrations have appeared on our pages, and many of the cars featured in this magazine have been built from his designs.

Two trophies will be created. One will be presented by Automotive Racing Products to the Slonaker Award winner starting in

January 2020. A larger version will be a perpetual award, displayed at the Hozy's Grill restaurant at ARP's facility in Santa Paula, California, and in the ARP booth at the SEMA Show in the fall.

For more information, visit rodshows.com. See more of Eric Brockmeyer's work at brockmeyerdesign.com.

Hot Rod Pioneer Makes SEMA Hall of Fame

◆ Bruce Crower, founder of Crower Racing Cams & Equipment, is one of three automotive industry leaders inducted into the SEMA Hall of Fame in July. A participant in the hobby since childhood, Crower began professionally manufacturing race products in 1955. From mounting a 6-71 blower on his Hudson to supplying the Crower Glide Clutch and wings for Don Garlits' "Swamp Rat" dragsters, Crower has dedicated his life to high performance.

The other 2019 inductees are Bob Chandler, creator of "Bigfoot," the Ford F-250 pickup that started the monster truck craze in 1975, and Marla Moore, marketing professional, industry advocate, and chairperson of numerous SEMA councils and committees.

For more information about the SEMA Hall of Fame, visit semahof.com.



Let's Build It Together



Lakester Window Cranks

Keyword: LOK Lakester Window Handle
as low as \$77.99 pair



Billet Aluminum Hose End Clamps

Keyword: BSP Hose End Clamp
as low as \$10.99 each



Vintage Hood Strap Kits

Keyword: LME Hood Kit
as low as \$295.99 kit



Firestone Vintage Bias-Ply Tires

Keyword: COK Firestone Vintage Bias
as low as \$188.00 each



Truck Grilles for Chevy

Keyword: OER Grille Chevrolet Truck
as low as \$249.99 each



OE Series Radiators

Keyword: BCI OE
as low as \$649.99 each



555 Series Paint Ready Artillery Wheels

Keyword: USW 555 Paint
as low as \$139.99 each



Sway Bar Kits

Keyword: CLP Sway Kit
as low as \$134.99 kit



Phantom Series Coilover Kits

Keyword: AAX Phantom Kits
as low as \$465.42 kit



HDX Direct-Fit Analog Gauge Systems

Keyword: DAK HDX Direct
as low as \$1,230.25 kit



Billet Trunk Hinges

Keyword: FSL Trunk Hinge
as low as \$319.00 pair



V8 Engine Grill

Keyword: HRH Engine Grill
HRH-GHH350EG \$739.99 each
SPECIAL HANDLING SURCHARGES APPLY

UNBEATABLE SERVICE, TECH ADVICE, SATISFACTION, AND SELECTION.



Call by 10 pm EST: In-Stock Parts Shipped That Day!

1.800.230.3030 • Int'l: 1.330.630.0230



FIND IT AT SummitRacing.com

SCode: 1909SR • Prices subject to change without notice. Please check SummitRacing.com for current pricing. Typographical, description, or photography errors are subject to correction. Some parts are not legal for use in California or other states with similar laws/regulations. Please check your state and/or local laws/regulations. © 2019 AUTOSALES, INC.

Nobody said, "What Edsel?"

In the midst of hundreds of hot rods, street machines, muscle cars, classic trucks, and race cars, it was a burgundy custom Edsel creating a big buzz at the SEMA Show in October, and again at the Grand National Roadster Show (GNRS) in Pomona in January.

Edsels hold a well-known place in American automotive history. Introduced for the 1958 model year and abandoned three years later, the marque was a famous failure for the Ford Motor Company and has remained popular mostly as a symbol of unpopularity. Even so, the Edsel has always had its dedicated, diehard fans. After memorable appearances in Las Vegas and Pomona, this burgundy and silver '58 Edsel Ranger, built by Bobby Alloway and the team at Alloway's Hot Rod Shop, has caused that list of fans to expand exponentially.

THE EDSSEL

YOU WON'T FIND ONE COOLER THAN THIS ALLOWAY-BUILT CRUISER

BY TIM BERNSAU

PHOTOGRAPHY BY JORGE NUÑEZ



Kathy Lange of St. Louis, Missouri, is not a recent convert. She has been an Edsel fan since she was a little girl. "When I was around 5 or 6, living in a small town in Kansas, my friend's uncle had one," she remembers. "It was a convertible. He'd drive it around town and we'd sit in the back seat waving to everybody we saw."

A few years ago, Kathy's husband, George, talked to Bobby Alloway about building an Edsel as a surprise for Kathy. George has had numerous cars built by Alloway and knew that this out-of-the-ordinary project would be great. During the course of the build the surprise was revealed and Kathy was able to contribute her ideas for the design of the car.

Everybody involved agreed that if you're going to build an Edsel, you ought to lean into it, keeping that Edsel identity front and center even amid all the great custom modifications. A concept illustration from Eric Brockmeyer provided a starting point for the design and a running but worn-out '58 Edsel Ranger from Charlotte,



North Carolina, provided the raw material. Without a lot of reproduction parts available from the aftermarket, Alloway turned to salvage yards for his search for the parts he needed. "I must have every

original Edsel piece out there," he told us. "So nobody can build another one!" And since the goal was to retain the stock look, factory lines were kept intact. Edsel fans at SEMA and the GNRS (and some reading this) noticed that Kathy's Ranger has been customized with front fender trim from the Pacer model, and rear quarter trim from the Citation model. The custom burgundy and silver paint combination was Kathy's choice and was shot at Alloway's using PPG products.

Billet Specialties has supplied one-off Alloway-designed wheels for numerous vehicles built at the shop. These five-spokes add some '60s muscle car flavor not usually associated with Edsels, but in this case it's a perfect match. At 17x7 and 20x10, with 225/50R17 and 295/50R20 Toyo Proxes tires, the rolling stock combo is

: THE EDSSEL

perfectly proportioned to the car—especially with that characteristic Alloway stance provided by the custom Art Morrison Enterprises (AME) chassis with Strange Engineering shocks and springs at both ends. Rack-and-pinion steering is updated with an electric power unit from American Powertrain. At the back, 4.10 gears spin in a Currie Enterprises 9-inch, located by the AME four-link with a Panhard bar. Wilwood 13-inch rotor/six-piston disc brakes are mounted at every corner.

The front-hinged hood lifts to reveal a beautifully finished engine compartment housing a blown Ford 5.0L Coyote engine, painted the same burgundy color as the sheetmetal but with a contrasting semigloss finish. Roush did the assembly on the 700hp big Blue Oval crate engine, adding a Roush supercharger, manifold, and fuel injection system. Custom coil covers from Greening Auto Company feature Coyote lettering. Headers and stainless pipes from Barillaro Speed Emporium carry exhaust gases from the Coyote to Borla ProXS mufflers. Alloway's installed a TREMEC TKO 500 five-speed transmission behind the Coyote.



“I MUST HAVE EVERY ORIGINAL EDSSEL PIECE OUT THERE, SO NOBODY CAN BUILD ANOTHER ONE!”

THE EDSSEL

The interior, like the exterior, was built with respect for the factory design but modified in a way you would expect in a Coyote-powered Edsel on an AME chassis. The horizontally mounted "rolling dome"—spinning 120-mph speedometer was the centerpiece of the factory instrument cluster and is restored and retained on Kathy's Ranger. The other four gauges were refurbished and converted to electric by Classic Instruments. The original Bakelite toggle switches below the gauges (lights, power antenna, courtesy lights, fan blower, wipers, and cigarette lighter) were discolored and crumbling with age and have been replaced with custom-made 3-D-printed replicas.

Steve Holcomb at Pro Auto Custom in Knoxville was commissioned to upholster the Edsel's interior. The charcoal gray color was a unanimous decision, and Moore and Giles premium leather was used to cover a pair of '64 Thunderbird seats and the matching rear bench. Other interior details include the fabricated console, Vintage Air A/C, and a Corvair steering wheel atop an ididit column.

This cool, Alloway-built '58 Edsel ended up not being a surprise for Kathy, but it's been a big surprise for thousands of people who have seen it in person or in print, wherever it shows up. The car received a Special Recognition for Outstanding Achievement in Design award from Ford at the SEMA Show. At the GNRS it won a *STREET RODDER* Top 100 pick. As Kathy's Edsel makes the rounds at car shows, the number of awards—and the number of Edsel fans—will just keep getting bigger. 📺



Coilover IFS
Starting at \$2,495



SuperSlam IFS
Starting at \$2,495



Spring Pocket Replacement IFS
Starting at \$2,695



Tri-5
Starting at \$4,195



Nova II
Starting at \$3,495



**'34 Ford
REAR STEER**
Starting at \$10,200



**'32 Ford
REAR STEER**
Starting at \$10,200



**'35-'40 Ford
FRONT STEER**
Starting at \$9,500



**'33 Chevy
Custom
REAR STEER**
Starting at \$10,200



**4-Bar
Rear Suspension**
COILOVERS or AIRBAGS
Starting at \$1,499

**The MOST Complete
Chassis for
ANY
YEAR/MAKE/MODEL
VEHICLE 1925-1987**

**100% TIG WELDED
100% AMERICAN MADE
100% BUILT-TO-ORDER**

Scott's
HOTRODS 'N CUSTOMS

@scottshotrods

@scottshotrodsandcustoms

Scott's Hotrods 'n Customs moved to Knoxville, TN in Spring 2018
www.ScottsHotrods.com • 800-273-5195 • 865-951-2081 • sales@scottshotrods.com



[TECH]

MANUFACTURE

Keeping it Quiet

John's Industries' 9-inch axles are the strong, silent type

By Barry Kluczyk Photography by the Author

John Melchiori hates loud rearends. Who doesn't? But Melchiori, who founded John's Industries more than 40 years ago, has made it his mission to put the decibels on the down low.

"Of all the sounds you want to hear from your hot rod, the ring-and-pinion isn't one of them," he says. "It's been a more difficult challenge in recent years, because of industry changes that altered the way most of the gears are machined. We've taken a number of steps to combat that."

He calls the company's effort The Quiet Zone Series, which includes road testing each and every one of the 9-inch third member assemblies they build and listening to the rearend through headphones linked to sensors in the axlehousing. If it's too loud, it doesn't ship.

"Original Ford axles are whisper quiet," Melchiori says. "The machining on them was excellent. Our techniques aim to get as close to that as possible."

He must be onto something, because John's Industries' roster of regular customers reads like a who's who of the hot rodding world; and you've undoubtedly seen the company's axles in tech stories and feature cars. Its auspicious acknowledgement for a company located in Michigan, but about as far

from the hustle of Motown that you can get ... Caspian.

Located more than 500 driving miles from Detroit—in the gorgeous wilderness of the state's sparsely populated Upper Peninsula,

encompassing about 17 percent of Michigan's land area, but holding only about 3 percent of the population—it's closer to Green Bay, Wisconsin, or Duluth, Minnesota, than the

Motor City.

Caspian, and the surrounding area, used to be the epicenter of iron mining, but the mines closed down more than 40 years ago. Melchiori was a few years out of high school, then, but had already learned his way around cars and machine shops. He started young, sweeping floors in his uncle's garage, before moving up to brake jobs and other repairs. It continued in high school, with automotive trade classes and banging gears on the clandestine



1 With more than 40 years of experience, John's Industries' 9-inch third member assemblies feature their own case casting and billet aluminum pinion support, along with all-new supporting components, including the ring-and-pinion and carrier.

Source It

John's Industries
(906) 265-9999
johnsindustries.com



Progressive Casualty Ins. Co. & affiliates. Annual premium for a basic liability policy, not available in all states. Rates vary based on how you buy.

A bad day on the road still beats a good one off it.

Stay out there with basic liability insurance starting at \$75 a year. Add roadside assistance for less than \$1 a month.

PROGRESSIVE

1.800.PROGRESSIVE | PROGRESSIVE.COM

Dramatization. Always wear protective eyewear.

TECH MANUFACTURE

quarter-mile that had been marked off on a lonely stretch of highway outside of town.

"I rebuilt my own Muncie four-speed and ended up building them for others," he says. "I also took a stab at narrowing my own axles in the early days of the trend, in the early '70s. The first set lasted only a couple of minutes, but I continued to work at it and figured it out."

By the mid '80s, Melchiori was in business for himself and discovered a hungry market for Ford 9-inch axles, which he was rescuing and rebuilding from salvaged vehicles.

"At first, it was mostly the truck guys who wanted them," Melchiori says. "There was a significant need for them and that kept us busy for a number of years."

But like those tough differentials, the gears in Melchiori's head were turning, searching for new ideas to expand his growing brand's reach. His interest in hot rods seemed like the logical next step, so he started advertising in street rod magazines.

"Nobody else was really doing anything like that at the time, and it gave us a good foothold in the market,"



Each third member assembly begins with a nodular iron case or a cast-aluminum case, each available in 3.062-inch and larger 3.25-inch bores. John's Industries' own nodular iron case is made to a unique specification that makes it about 70 percent stronger than factory castings. It's offered with the conventional 3.062-inch bore.



A variety of popular carriers are available, including the company's own Trac-Loc limited-slip unit, which is assembled in-house. It gets started, here, with the carbon clutch pack in the housing.



The carrier assembly continues with the installation of the spider gears in the case, which work with the clutch pack in a limited-slip design to reduce the wheel speed of the fastest-turning wheel in order to maintain the same relative speed between the wheels.



With all of its guts assembled, the Trac-Loc carrier is buttoned up and prepped for installation in the third member.



Work moves on to assembly of the third member, starting with a nodular iron case, mounted on a special vise developed by John's Industries. Dubbed the Orbit 480, for its range of motion, it's designed specifically for assembling 9-inch centersections.

First, the third pinion bearing is installed. It fits within the case, driven into place through the pinion opening. A few well-positioned taps on the outer race seats it; lock rings are then installed.



HOUSE OF KOLOR

PREMIUM KUSTOM FINISHES SINCE 1956

Legendary Colors for Legendary Builds



POCKET GUIDES NOW AVAILABLE

FEATURING OVER 800 CUSTOM COLORS REPRESENTING THE INDUSTRY'S TOP TRENDS

SEE YOUR LOCAL JOBBER FOR AVAILABILITY AND PRICING

HOUSEOFKOLOR.COM





8

■ Proper pinion preload, the force between the pinion bearing assembly and the race, is essential for quiet operation and longevity. When the pinion nut is tightened, it forces the yoke against a crush sleeve. Insufficient force will hold the pinion bearing too far from the race, resulting in not enough preload, while too much force will result in excessive preload. The proper preload is determined with a torque-measuring tool, which should indicate 13-15 in-lb for the proper preload on a 9-inch with new bearings.



9

■ With the pinion in place, the differential assembly, with the ring gear installed on it, is slipped into place at the rear of the housing. Note that the assembly is installed with its bearings and races already in place.

Melchiori says. "We knew the product really well, too, but over the years, we were relying more on suppliers for supporting parts, because the pool of take-off parts from salvaged vehicles was shrinking."

Over time, demand for John's Industries' axle assemblies was outstripping the capacity of parts vendors to keep him with an adequate supply of housings, third members and other supporting components. And with ever-increasing horsepower demands and the need to match them with stronger, durable rearends, Melchiori had the housings, third member cases and other parts cast and produced locally. The company has three stamping dies, with a fourth on its way.

"We have our own housings stamped, and the third member cases cast exclusively for us," Melchiori says. "Along with ensuring the inventory we need, that move also helped us up our game when it came to quality and production because we had more control over the machining process."

And then came the louder gearsets. "Generally speaking, the industry changed the way it machines the teeth

on the ring-and-pinion gears, mostly in order to reduce machining time," he says. "The result was significantly louder operation on the highway. It was unacceptable to me, and we started pushing back to achieve quieter performance for our customers."

With that in mind, we booked a flight to the Upper Peninsula to check out the operation and the testing procedures for ourselves, finding that each and every Quiet Zone Series assembled third member is installed in the company's test vehicle and road-tested.

After listening to more than one axle during the road tests, we were surprised by the differences in sound levels they produced. Melchiori is right about the elevated noise levels, particularly when compared against the original-production ring-and-pinions.

"It's a challenge, but it's one we're dedicated to," he says. "The vehicles people are building are very high quality, and they deserve high-quality axles that don't detract from the rest of the driving experience."

Well put. Here's to quiet axles everywhere, from old iron country. 📺

■ Adjuster nuts on the 9-inch are one of its many advantages, because they make setting the ring gear backlash very easy. Rather than the shims used on many axle designs, including Ford's own 8.8-inch, the 9-inch adjuster nuts simply require loosening one side and tightening the other to shift the gear into the proper position.



10

■ Next, the mesh pattern of the gears is checked, starting with applying some marking compound to a number of the ring gear teeth. Ideally, the pinion should mesh near the center of the face of the rear gear teeth. There's a drive and coast side to the ring gear teeth and the drive side is the more critical side of the mesh pattern.



11

STREET ROD HQ GAS TANK SEALER

GAS TANKS, SENDING UNITS & STRAPS AVAILABLE FOR:
BUICK | CADILLAC | CHEVROLET | DODGE | FORD | LINCOLN | PLYMOUTH AND UNIVERSAL APPLICATIONS



TANKS

YEARS 1937 - 1964

\$150.00 - \$912.00

ALL YEARS

\$32.00 PER QT.



STRAPS

YEARS 1937 - 1964

\$17.50 - \$49.00



FUEL DOOR KITS

AVAILABLE IN 45 OR 90 DEGREE FILLER NECK. FLAT OR CURVED FACE. SQUARE, ROUND, TEAR DROP OR OVAL DOOR.

ALL YEARS \$135.00

FUEL PUMPS

IN TANK AND IN LINE AVAILABLE

\$50.00 - \$235.00



STREETRODHQ.COM 1-866-681-7484

FLUSH AIRCRAFT STYLE FUEL FILLER

ALL YEARS

\$85.00



GAS TANK REPAIR KIT

\$89.00



SENDING UNIT

YEARS 1937 - 1964

\$25.00 - \$89.00



LS SWAP FUEL LINE KITS

INCLUDES ALL LINES, FITTINGS AND PRESSURE REGULATOR

\$237.00 - \$247.00



12

The first pattern inspection, here, showed the mesh was a little too close to the heel (outer) edge of the teeth. Adjustments are made by adjusting the pinion cartridge shims and re-setting the ring gear backlash. It can take several attempts and shim adjustments to get it just right.



13

After a couple of adjustments, the pattern has moved inward on the teeth, indicating this mesh contact pattern is good to go.



14

The assembled third member is sent for road testing where it is installed in the company's test vehicle. The easily removable design of the centersection is one of the things that has always made the 9-inch a favorite with racers and it certainly helps facilitate such tests here.

The test vehicle is an S-10 that's mechanically stock, except for the rear axle setup. It was also lowered for a proper hot rod stance.



15



16

The S-10 is modified with a lift equalizer in the bed, featuring a ring that holds the third member during installation and removal, allowing a pit stop-like changeover from one centersection to the next in about 20 minutes.

With the newly assembled third member installed, it's driven for approximately 20 miles, at different speeds, to confirm not only its operation, but gauge its noise levels and ensure it meets the Quiet Zone Series standards.



17

WHY THE FORD 9-INCH?

Introduced in 1957 and produced through 1986, the ubiquitous Ford 9-inch rearend is the industry standard for hot rods, off-roaders, race cars, and just about everything else with rear-wheel drive, with a whole sub-industry set up to build aftermarket replicas and service the population of surviving originals.

But how and why did it become the de facto high-performance axle choice? Three primary reasons:

1. Strength: Compared to other admittedly strong axles such as the big Dana axles used in Mopars, the 9-inch's strength advantage is a greater hypoid distance, or gear offset, which is the measurement between the center of the ring gear and the center of the pinion gear. Greater distance means there's more gear-tooth surface contact between

the ring gear and pinion, for greater strength. There are other strength-enhancing attributes, but this is the biggie.

2. Drop-Out Third Member: The 9-inch wasn't the first axle design to feature a removable, or "dropout," centersection, but as its reputation for strength grew, builders found the design had a lower center of gravity and was much easier to work with, allowing comparatively quick changeovers or servicing, especially at the track.

3. Virtually Unlimited Gear Ratios: Without differential housing restrictions to worry about, a 9-inch differential will accept essentially any gear ratio that can be thrown at it. As such, the aftermarket industry has responded over the decades with more available ratio choices than any other axle type. There's nothing like it.

ENGINEERED FOR MAX PERFORMANCE!

AME's Multi-Link Independent Rear Suspension delivers what noted SCCA champion Mary Pozzi calls "The BEST suspension I've ever felt underneath a car on a track!"

Multi-Link IRS is offered on AME Tri-5 GT Sport chassis as shown plus other applications.



The Multi-Link IRS was popularized by marques like Ferrari, Porsche and BMW —and Morrison takes it a step further with brute strength and the ability to handle serious horsepower. It has many important features that "old style" Jag, Cobra, C2/C3 and aftermarket designs lack.

What's more, the AME Multi-Link IRS is also ideally suited for the street. Benefits include the ability to maintain stable corner load situations, establish functionally independent camber and toe curves, and enjoy a quieter ride with reduced noise, vibration and harshness. You get it all!

Multi-Link IRS is available in rear clips, like this Gen 1 Camaro setup. AME now offers compact, short and full-sized IRS cradles.

MORRISON



email: sales@artmorrison.com
866-558-1654

www.artmorrison.com





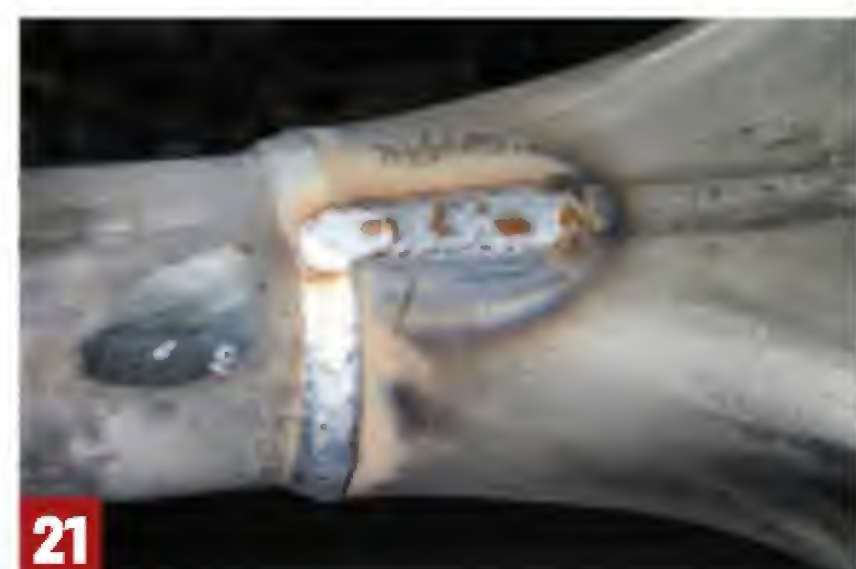
18 Inside the test truck, two sets of headphones connected to special sensors mounted in the axlehousing allow technicians to listen to the inside of the axle and note the drive and coast sound levels of the ring-and-pinion. We listened to different assemblies on more than one testdrive and were amazed at the audible variances.



19 Some of the third member assemblies are shipped individually, while others are installed in complete axle assemblies that John's Industries builds in-house. They even make their own housing centers, which include three production styles: standard, heavy-duty, and extreme. There are two rear cover choices, too: round and notched.



20 Axletubes are welded to the housing center on a unique, rotating jig that helps produce more consistent welds and does so quite quickly.



21 Here's a close-up of one of the welds, each of which is critical to the assembly.

The mounting options for the axles are almost limitless, and John's maintains an inventory of mounting brackets for popular applications such as GM A-bodies, vintage Fords, and more. They'll even do custom applications, as long as they have the dimensions and/or the brackets from the original axle as a template.



22



23 John's machines their own axles, too, from supplied blanks. They prefer screw-in studs versus conventional press-in studs for a few reasons, not the least of which dimensional accuracy and greater safety. They're more secure once they're attached to the axle flange.



25 There are even several drum brake options to complement the axle assembly, including production-style 10- and 11-inch sizes in both the small- and big-bearing designs. John's also installs Wilwood disc brakes.



24 This clever, Buick-style finned brake drum is made by John's and designed to look like the original, but is machined on the back side to work with the standard Ford brake components.



26 All boxed up and ready to go, this complete axle assembly, like most others, is shipped bare, so the installer can paint it to his or her specifications. And it'll be quiet.



(800) 221-3673 bobdrake.com

SR0719A

feature

MADAM X

CHIP FOOSE BRINGS THE ART OF ART ROSS ALIVE

BY JOHN GILBERT

PHOTOGRAPHY BY ERIC GEISERT

It's been almost five years since *STREET RODDER* jumped on a lead Chip Foose was building a bespoke project that was going against the grain of the mainstream public's stereotype of Foose's designs. Beyond the future-forward look of *Overhaulin'* builds, truth be known there's not an automotive genre that Foose doesn't appreciate or doesn't have the ability to execute from a design on the drawing board to a completed vehicle. In the instance of Madam X, Foose and client Wes Rydell were thumbing through a book of prewar Cadillac photos when they spotted a concept illustration by Art Ross.

It was 1935 and Ross was a newly hired member of Harley Earl's Styling Section. Ross drew the two-door Cadillac convertible in 1935 and proposed it as a '37 model, but the design never saw the light of day. Future contributions to Cadillac styling by Ross was designing a broader hood that superseded Cadillac's needle nose look before he moved onto chief of design for Oldsmobile.



As homage to Ross and Earl, the moniker "Madam X" was adopted from Harley Earl's term to describe special one-off projects. The donor car for Madam X was Wes Rydell's '40 Cadillac 60 Special Sedan. Before Madam X was completed a second Cadillac four-door sedan was sacrificed for the cause. It's intriguing two entire '40 Cadillac four-door sedans were parted out because as one can see the mass of Madam X's exterior body panels comprise a one-off two-door convertible.

Madam X is a coachbuilt automobile. In hoity-toity terminology the process of constructing a coachbuilt car is deep rooted in rich artisanal heritage with the results exuding the qualities of fine craftsmanship. A little pretentious sounding, maybe, but after close inspection of the metalshaping Foose and Luc De Ley formed to produce Madam X who could disagree.

Madam X is where old-school coach building traditions and modern technology meet. Madam X is much more than a '40 Cadillac with a '39 hood



MADAM X

and grille. Foosé re-proportioned Madam X using '39-'40 production parts, the windshield frame was made 8 inches wider to look right with a cowl and front fenders that are 10 inches longer.

Under the Cadillac dream car's skin beats the heart of a Cadillac Escalade, C6 Corvette, and '15 Camaro. But lifting the hood is not delving deep enough to reveal Madam X's secret. The Cadillac Green 376ci, direct-injected '15 LT1 Corvette engine is topped with a Foosé redesigned and custom-fabricated '52 Cadillac vintage-style air cleaner that functions via a K&N air filter located within the inner fenderwell. The reworked '50 Cadillac valve covers complete the LT1's transformation from cluttered techno-engine into a prewar time warp. The automatic overdrive eight-speed transmission, along with a shortened driveshaft, was sourced from a '15 Cadillac Escalade. Exhausting the Corvette LT1 with a subdued throaty note is handled via a custom-fabricated MagnaFlow stainless steel exhaust system. Speaking of stainless steel, the gasoline tank holds 20 gallons and came from Tanks Inc.

From the automatic overdrive transmission to the rearend, a description of the numerous modifications Foosé and Dennis MacPhail made to the stock '39 Cadillac chassis should be mentioned first. The stock 129-inch wheelbase frame was stretched 2-1/2 inches and fortified to accept a stock '15 Camaro differential with brackets custom made to mount a C6 Corvette IRS. The C6 cradle was narrowed 2 inches and new half-shafts were made. A stock C6 Corvette rear sway bar and JRi coilovers completed the rear suspension.

The '15 Corvette LT1 engine offers no provisions to drive a conventional mechanical power steering pump, so in place, to decrease manual steering effort by 35 percent, is an Electra-Steer unit from Unisteer. The '49 Cadillac steering column



got the Foosé treatment, from being topped with a custom-painted '49 Cadillac steering wheel to adapting a '16 Escalade column shift to look at home. Sprung with JRi coilovers, the front suspension features C6 Corvette uprights and relies on an Art Morrison Enterprises front sway bar

to mute body roll. Electronic assist with ABS supports C6 Corvette disc brakes mounted at each corner.

The one-off Foosé Design wheels replicating 15-inch Cadillac hubcaps with wide whitewalls are solid billet aluminum cut by Mike Curtis of Mike Curtis Design; 18x8 in the front



See more at optimabatteries.com.

OPTIMA
BATTERIES
THE ULTIMATE POWER SOURCE



THIS ISN'T JUST A BATTERY. THIS IS THE ULTIMATE POWER SOURCE.

Power. Performance. Reliability. When you've got an OPTIMA® battery, you can count on The Ultimate Power Source® to bring you nothing but the best. From the legendary SPIRALCELL TECHNOLOGY® that paved its way into history, to the all-new YELLOWTOP® with PUREFLOW TECHNOLOGY™ now available for modern domestic vehicles and European imports, OPTIMA Batteries has you covered. No matter if you're on-track, off-road or on the highway, there's an OPTIMA battery that's built to fit and perform for you. To learn more about the OPTIMA family, visit optimabatteries.com.

DEEPER DEEP CYCLES



OPTIMA® YELLOWTOP®
GROUP 31 DEEP CYCLE
(155 RC / 75 AH / C/20)

TRADITIONAL
GROUP 31 DEEP CYCLE
(185 RC / 98 AH / C/20)

NOW \$199.99*
STARTING AT

TO BUY, VISIT OPTIMABATTERIES.COM
OR YOUR LOCAL AUTO PARTS RETAILER.

Johnson Controls

and 18x9 in the rear, mounted with Pirelli P Zero 235/65R18 in front and Pirelli P Zero 255/6018R in the rear.

In keeping with blending modern convenience with period-correct styling, the interior features controls concealed beneath a steel dashboard, faux wood grained in BASF paint by Foose and Alberto Ahumada. Vintage Air A/C and Arc Audio controls disappear and reappear with the move of a hand, whereas the '39 La Salle gauges, restored and updated by Redline Gauge Works, are fixed in the original position.

The interior upholstered by Ahumada at 714 Motorsports features a '46 Chevy two-door bench seat in Katzkin Cognac-hued leather. Hand-formed in aluminum by Luc De Ley and Foose, the removable hardtop was covered in Haartz Stayfast cloth and headlined in broadcloth by Little John's Interior Concepts. The rear window is stock.

Done completely in-house, Madam X was wired from its '39 Cad headlight buckets reworked for sealed beam headlights to the taillights custom machined to match the stock '39 Cad turn signals and all points in between by Petee Morell. Selecting a color to paint Madam X followed in line with the



car's bespoke origins, the choice after Foose, Doug Petersen, and Luc De Ley completed the bodywork. Tommy Marcotte flew in from Grand Forks, North Dakota, and joined Steve Deman to spray Madam X Rydell Real Maroon in BASF Glasurit materials.

Handled by Greg Cox of Artistic Silver Plating the chrome-plated brightwork on Madam X is a combination of original Cadillac and custom-made parts. It was a repetitious process of copper plating and hand blocking and then re-plating with copper before nickel and chrome plating could complete. The bumpers are '39 Cadillac issue, accented with custom-made over

riders. All hand-formed in brass, the upper belt molding, triplet of rocker moldings, as well as the vertical grille bars were final-finished in chrome.

Flying in the face of stereotyping Foose's work, Foose-constructed cars are designed and built to drive. That's not always the case because some of Foose's patrons prefer to keep their cars as intact as they appeared on delivery day, but Wes Rydell drives his cars. When *STREET RODDER* attempted to interview Wes by phone we were informed Wes and his wife, Vivian, were on the first half of a 2,200-mile journey driving Madam X from Grand Forks, North Dakota, to a car show in Columbus, Ohio. 🚗



FAT MAN

33 YEARS

Nobody Can Fit More Cars & Trucks!

'57 Buick Buick For Bryan Frank By Customs By Kikewy

Sub-Frame Your Stock Chassis For A Great Look And Superior Ride And Handling!

- 1935-59 Buick*
- 1936-68 Cadillac*
- 1937-70 Chevy Cars
- 1964-72 Chevelle
- 1934-55 Chrysler
- 1934-56 Desoto
- 1934-56 Dodge Cars
- 1949-63 Ford Cars
- 1955-57 Thunderbird
- 1940-53 Hudson
- 1935-40 LaSalle

- 1949-56 Lincoln
- 1949-56 Mercury
- 1940-48 Nash
- 1934-59 Olds*
- 1935-56 Packard*
- 1934-56 Plymouth
- 1937-60 Pontiac
- 1948-62 Studebaker*
- Avanti, Lark
- Henry J, Kaiser, Jag
- Mercedes SL*

Correct Axle Centerline

Radiator Core Support Allows Easy Sheetmetal And Bumper Mounting

The Clean Simple Solution!

Heavy Gauge 3/16" Steel Jig Welded For Precision Fit

Optional Sway Bar Shown

Optional Power Rack & Pinion Shown

Shown With Optional Stainless Steel A-Arms, Stage 3 Components

Fully Welded Stage 2 Sub-Frame Bars
\$1,500

Stage 2 Hub To Hub Sub-Frame Kit
\$3,300

Stage 3 or 4 Hub To Hub Sub-Frame As Shown
\$3,900

Stage 5 Air Ride Hub To Hub Sub-Frame
\$4,500

NOTE: For 1958 and later applications add \$180

See Other Suspension Options & Details Below ➔

Shoobox Ford Power Steering!

NEW! For 1949-51 Ford Cars

After years of R&D effort, our product engineers, along with Borgeson, have developed the perfect Power steering system for these popular cars. A special reverse rotation steering box and our mounting bracket make a simple installation. Use with our Steering Linkage kit or your stock steering column.

NOTE: Because of header clearance issues, this kit will not work with flathead engine cars.

Power Steering Kit With Bracket And Pitman Arm
\$935



Get The Low Look At A Bolt-In Price!



Direct Fit 2" Dropped Spindles

The quick and easy way to get the look without major chassis work! Call us today for 50's, 60's and 70's applications. Kits use easy to source 12" GM rotors and Camaro calipers.

GM Spindle Kits From **\$620**

Ford Spindle Kits From **\$545**

FAT MAN FABRICATION™
www.fatmanfab.com



Made In The USA



Nobody Can Fit More Cars & Trucks!
704-545-0369

Mon-Thurs 7am-5:30pm EST • Fri 7am-12 noon

SR 3-18

Hub-To-Hub Kits To Install On Your Frame

Stage 2



\$1,995 Hub To Hub Kit

Jig welded tubular steel A-arms. Manual rack, NEW spindles & shocks. OE style big brake kit. Why pay hundreds more elsewhere?

See Our A-Arm Upgrade Options At Right

Stage 3



\$2,595 Hub To Hub Kit

Ultimate IFS! Jig welded tubular steel A-arms, genuine QA-1 coilovers. Manual rack, NEW spindles & shocks, and OE style big brake kit. There's NO comparable deal!

Compressor Systems Available

Stage 4



\$2,595 Hub To Hub Kit

Fatman air ride IFS. Jig welded tubular steel A-arms, Firestone IV air spring set. Manual rack, NEW spindles & shocks, and OE style big brakes.

Stage 5



\$3,195 Hub To Hub Kit

Jig welded tubular steel A-arms, RideTech Shock Wave system! Manual rack, new spindles & adjustable billet shocks, and OE style big brake kit. The ultimate in comfort and ride height adjustability!

***Fat Man Crossmembers Now Feature One Piece CNC Machined Support Tubes Running Completely Through Side To Side!**



Source It

Harbor Freight Tools
(800) 423-2567
harborfreight.com

Highway 99 Hot Rods
(559) 651-1457
highway99hotrods.com

PPG Industries
(412) 434-3131
ppgrefinish.com

Summit Racing Equipment
(800) 230-3030
summitracing.com

TECH

E D U C A T E

Burning Sensation

Part 1: Tips 'n' Tricks for "Traditional" Flames

By "Rotten" Rodney Bauman Photography by the Author & Don Dillard

You can buy a box o' tools, but you can't buy a bag o' tricks. How deep is yours? How often do you pull out the one at the bottom of the bag? For yours truly it's been a while or two. As a body 'n' paint guy I'm steadily pounding and painting old hot rods, but, thinking back, it's been close to 10 years since I've flamed one.

his rear fenders, roof, and deck. Since flames were the plan from the face-lift's beginning, the coupe's beltline moldings have been deleted. Sure, we could have dealt with them, but we'll do better without. For the type of layout we have in mind, the only remaining obstacle is the hood, which was louvered in-house at Highway 99 Hot Rods. Louvers can challenge the pyrographic artist. We've



Flames are fun, but bring your lunch. Now, I'm not sure why my tamales came with a fortune cookie, but its message seems pertinent: "The project you have in mind will soon gain momentum."

flames. Although there's a crafty pyrographic artist near Tulare, yours truly in Columbia Falls, Montana, received the call. With winter fast approaching, it won't be long 'til our own shop gets chilly. The timing is right. I'll take that flamejob in Tulare, and gladly travel to do it.

First, before we load and hit the road, let's take a minute to go over our game plan, shall we? According to Dillard, the coupe's owner knows what he wants, and he doesn't want flames on



2

Skippin' ahead to day two, the panels to be flamed are now properly color-sanded. With the drudgery portion of this job out of the way for now, let's get off to a clean start with a proven grease 'n' wax remover. With clean disposable toweling, one hand applies and the other hand dries—before the solvent can evaporate on its own.

PERTRONIX

IGNITION PRODUCTS



PERTRONIX
IGNITION PRODUCTS

Quality Products For Over 40 Years!
www.PerTronix.com | 800-827-3758

THE SOURCE!

For the Serious Builder!

Emergency Brake Handle

Lay down ratchet style.
Cable not included.
Handle only.....\$38.00
Boot only.....\$22.00

Brake Lever Mounting Bracket

.....\$14.00

Custom E-Brake Junction Bracket

Designed to make installation of our e-brake cables quick and easy.....\$18.00

Hood & Deck Lever Controls

Comes with our "No Fray Stop", finish cap and mounting clips.

POLISHED 84" Hood Lever Assembly.....\$58.00

POLISHED 180" Deck Lever Assembly.....\$63.00

POLISHED 84" & 180" Dual Lever Assembly.....\$110.00

BLACK 84" Hood Lever Assembly.....\$68.00

BLACK 180" Deck Lever Assembly.....\$73.00

Emergency Brake Foot Pedal

Push on, push off with built-in brake switch. Unit comes installation ready.....\$65.00

Your Source for Components

Throttle Pedals and Brake Pads

Universal Throttle Cable

Nylon lined with flexible stainless inner cable. U-Cut-To-Fit Unit comes complete. Also available in stainless and custom lengths.

24" cable.....\$42.00

48" cable.....\$46.00

NEW
Uses no set screws!

Multi-Use Control Cables

Billet knobs with nylon lined cable housing. Available in flexible or solid stainless steel inner cable. Optional T-handle add \$2.00.

120" Black Housing w/No Fray Stop, w/clips\$32.00
84" Braided Stainless Housing.....\$39.00

Polished Stainless Steel Throttle Linkage

No need for a manifold bracket. Our telescopic throttle linkage is designed to mount directly from the firewall to the carburetor and can extend from 10" to 16". Seals heat out of passenger compartment. Comes complete with all mounting installation hardware.....\$37.50

VISA MasterCard
Control CABLES INC.

Order Line: **562 / 949-0455**

www.controlcables.com

9816 Alburton Ave., Santa Fe Springs, CA 90670
Quality Engineered Products / Prices subject to change without notice

TECH EDUCATE

all seen louvers dealt with, but they're really tough to mask, and more often than not they'll interrupt the flow of flames. For that reason let's concur to steer clear of the louvers.

Earlier we mentioned that this would be a traditional-colored flamejob. Since the tricky T-word means different things to different people, it might be wise to clarify. Whether or not we were here in the mid '50s, we should at least be familiar with the Bob McCoy '40 Tudor, which was actually flamed as a surprise by his friend, Ray Cook. That's quite a story—and as the story goes that's the flamed '40 that started it all.



For the flamejob at hand let's stick with 3M tape. Because it stays put better in tight turns, I prefer the green crêpe-style tape over fine line. Providing we keep paint buildup down, it'll cut a nice edge.

Since the mid '50s we've seen that there's more than one way to flame a '40. The flamejob at hand will be more of a mid '60s and later style—the style that influenced yours truly as a kid. Allegedly growing up in Riverside, California, my personal influences were Richard McPeak, Corky Root, and Al "Gormo" Norman. At one time or another I've worked for and/or with all three, and honestly it's my honor to simply emulate with my own combination of their similar styles. In a nutshell, our layout will be symmetrical, our blends will be smooth, and they'll continue blending should we decide along the way that tips should cross.

On this particular job, our flames' pinstripe outlining will be protected beneath urethane clear. The panels involved will be color-sanded before the layout process begins. Once our



Just as a personal preference, I like to begin my symmetrical layouts in the center of the hood and then move down the driver side of the car. Before we get too creative, however, let's stretch out some 1/4-inch tape to establish a centerline.



This part is important. If you're not completely sure that you'll be proud of your layout years later, take it off and start over—now.



Along the way there will be many adjustments made, which is pretty much the way it should go. At this point we still have some kinks to work out. The growing tape ball on the left A-pillar is waste, but it's OK. It's better to waste a little tape than live with a lousy layout.



In six places we've decided that tips should cross. The trimmed-out tape will be replaced toward the end of our upcoming spray session. For extra dimension, the crossin' tips will be shaded redder than the areas they'll overlap. In the end, the effect will be worth the extra effort.



Here's our layout. It'll be easier to visualize when we fill the voids with green tape. We can also expect a few more kinks to work out, but that'll be easy.

LS Classic

LS PERFORMANCE WITH A VINTAGE LOOK



TRI-POWER INTAKE SYSTEM



63 FUELIE INTAKE SYSTEM



14" CLASSIC INTAKE SYSTEM

www.LSclassic.com
1-330-241-9520

CUSTOMIZABLE CRATE ENGINE PACKAGES AVAILABLE

Chevrolet Crate Engine Packages are available with our complete lineup of LS Classic parts. Shipped to your door ready to run.



TECH EDUCATE

flames are in living color, they'll receive two coats of clear to protect our blends from any accidental boo-boos that could occur during further color-sanding. After pinstriping, this car's front fenders, hood, and doors will be removed for the car's final clearcoat application—and that's the plan as it stands.

Once we arrive and actually begin we'll include brief descriptions of materials used—brief, only due to

ever-evolving technology—and of course our various localities' legalities. Since we'll be working in California we'll go with California-compliant Omni basecoat colors from PPG. This will be my first time shootin' Omni basecoat, but Dillard assures me that it handles quite similar to good ol' DBC, which I still enjoy shootin' at home. For staples like tape, paper, and so on, we'll rely on quick shipments from Summit—same

as I do at home.

Next stop: Tulare, California! Job one will be flaming a '40. Job two will be sharing tips 'n' tricks that the first-time flamer with previous painting experience can run with. From here, the step-by-step stuff will focus mainly on tools and technique. Once again, there's more than one way to flame a '40. Indeed there's more to it, but here's how we do it. 📷



With visual rewards along the way, the fill-in part is kind of fun, but be prepared for sore fingers. Providing it's offered, accept help. Here to the right, Highway 99 Hot Rods proprietor Don Dillard takes a break from other duties to lend a hands-on hand.



As we've seen, our layout was established using 3M 1/4-inch masking tape. From there we've used 3M 3/4- and 1-1/2-inch tape to fill in, but there are other ways: shelving contact paper, vinyl sign transfer paper, and so on.



Now that we're satisfied with our left-side layout, let's reverse it for right-side symmetry. For this we'll create perforated pounce patterns; that's what they're called.



For easy-to-handle accuracy, let's cut these patterns to the shapes of each body panel. This step will involve 36-inch masking paper, 3/4-inch tape, and a single-edge razor blade, for starters.



The next step will involve my favorite crayon. With its paper label removed, it can be laid on its side and rubbed across the paper along the edges of our layout to create a visible guideline for steps to follow.



This fat-fendered '40 is quite curvaceous, so we've used six varying lengths of paper. To hold their shapes, their folds are taped. Now, one-by-one, let's take each section to the table.



To use the body's beltline as a guide, this quarter-panel pattern could use a trim. Following a dull Sharpie scribe, a little off the top will ease proper placement. Back at my own shop I use a large sheet of fiberboard for what's next. Here on location, clean cardboard might suffice.



Highway 99 Hot Rods is a well-equipped shop. Still, I prefer to have my own familiar equipment. Before traveling I'd gathered my spray guns, but I couldn't find my pounce wheel. Throughout my career I've only owned one. Now, thanks to the "Interweb" I own three in a range of different sizes.



So, with a paper pattern laid flat on clean cardboard, the pounce wheel is guided along the innermost outline of our design. Its pointy spur produces perforations, which will come into play later on. Here good lighting helps, as a Harbor Freight freebie flashlight earns its keep.



www.yogisinc.com

BORGESON
Steering You Forward

Steel U-joints starting at...\$80

Steel, Stainless & Polished

Steering shafts. 3/4"-36 spline or 3/4"-DD design Starting at...\$25

LECARRA
Leather Wheels

Full wrapped leather wheels available in 11 colors. Starting at...\$160



Dakota Digital offers a wide range of remote entry systems to fit your needs. Starting at...\$130



"TANKS"
Inc.

In-Tank fuel pumps are available for poly and steel tanks. Pumps starting at...\$205

TRIGUE

Door latches for Ford & Chevy available from Yogi's.



MSD



Atomic EFI kits available in a Basic & Master Kit. Starting at...\$2130



Many styles and shapes of vents available!

TBI
PRODUCTS

YOGI'S

Chevy gear reduction starters. Plain...\$125 ~ Chrome...\$150



DS

Firewalls & Floorboards available for 28-59's. Please call for pricing.



The finishing touch
CLASSIC INSTRUMENTS

Many styles and sizes available. Starting at...\$481



Cooling Components
2500 CFM fans. 5 sizes available & only 2 5/8" thick...\$298

willwood
DISC BRAKES



Residual Line Valves for Disc or Drum Brakes...\$20 Proportional Valve...\$42



RON FRANCIS WIRING
Express GM, Ford and Mopar complete harness. Starting at...\$460

Tight Tuck headers fit tight to your engine block. Uncoated starting at...\$157 Coated starting at...\$285



ridetech

For the best ride in Coilovers choose RideTech.



We have the parts to make your dreams come true.

© YOGI'S, INC. 2017

Prices subject to change without notice!



18

Our panel-shaped patterns are now flipped and aligned in position. Alignment is scrutinized to ensure close-as-possible symmetry. For starters, the hood's 1/4-inch tape centerline is still an important reference.



19

From the local hardware store we've purchased powdered marking chalk. From the local five 'n' dime we've purchased ladies' nylon stockings. Now technically, we could call this a pounce bag.



20

The pounce bag is a time-tested tool, but there are other options. You could spend some dough on a fancy box version from an art supply store. For our purposes here, it's chalk in a sock.



21

Although it's hard to see, we're confident that powdered chalk has been delivered through our patterns' perforations. Before removing patterns, let's gently blow away excess chalk.



22

With our patterns now removed, we do indeed have a decent guideline. At this stage let's steer our 1/4-inch tape just outside of the chalk dots. Again, there'll be some kinks at first but we'll smooth them away soon.



23

Now that the hood and vertical panels are roughly laid out, it's a good time to address the fender. This curvy pattern's folds have been folded and taped again as necessary to reverse the pattern.



24

Protruding as it does, this fender would have been pretty easy to brush up against, which likely would have erased our chalk lines. Treated as a separate step, we'll only do this once.



25

So, to this point, we've only taped outside the chalk dots. Therefore, the right-side layout is a little wider-spread than the left. We still have some fine-tuning to do, but before we go any further, let's blow away all of the chalk.



26

Now, let's take a second lap with 1/4-inch tape. This is our chance to work out the kinks. This time steering inside to where the chalk dots actually were, we'll achieve left-to-right symmetry without trappin' chalk under tape.



27

Again, the fill-in part is kind of fun, but my ol' fingers are still sore from the last time. So are Dillard's, but as always, he's there for me. This side should go quickly.



28

For a clean, non-fuzzy effect, we'll tightly direct color into the doorjamb. For adhesion the 'jamb's are still in need of preparation. Here a small section of a red Scotch-Brite pad fits the bill.



29

Under this roof we've done all we can. It's time to haul the flammable '40 to a neighboring paint shop. Next month we'll switch to living color.

THE FOUNDATION OF PERFORMANCE


Ford
1935-40

Ford + Chevy Truck
1948-56 1947-72

Chevy
1955-57

Impala
1958-64

REVO

REVO

REVO

FAST TRACK

feature

CLARENCE GOT CLEARANCE

WIFE SAYS CUSTOMIZE THE IMPALA!

“How do you like me now?” might be the question Clarence Goodwin’s ’61 Chevy Impala would ask if it could talk. You see Clarence didn’t make a whole lot of changes when he first got the ’61 Impala, and for that matter he really wasn’t looking for a ’61 Impala when he bought the car. One might say it was Clarence’s dad who was to blame for him picking this particular year and model of car.

The year was 1961 and Clarence’s dad bought a ’61 Chevy Impala right off the showroom floor, so when Clarence spotted a ’61 Chevy Impala bubbletop for sale in his local newspaper nostalgia made him jump at the chance. The classified ad hadn’t

main thing was to set the stance by lowering it on airbags and mount up a set of custom wheels and tires. Then that fateful day came when Clarence’s wife gave him the clearance to go ahead with a complete renovation done by a



been in the paper more than a day when Clarence met with the original owner and cut a deal for \$7,900.

For the first seven or so years of owning the bright red with red-and-white interior Impala, Clarence did a minimum of modifications. The

professional shop.

Clarence commissioned Ronnie’s Hot Rods in Senatobia, Mississippi, to totally customize his ’61 bubbletop, and the shop started by stripping the car down to the bare frame and building it up from there. The stock

’64 X-frame was kept, along with the air-ride suspension. The air-ride setup Clarence and his son, Trent, installed on the ’61 back when Clarence first got the car was a basic RideTech system, retaining the OE upper and lower control arms in front and stock trailing arms in the rear.

Pleased with how the basic air-ride system worked, Clarence went for

the gusto and bought RideTech’s complete system for ’59-’64 Chevy B-body cars. This meant a full conversion to tubular components, upper and lower StrongArms with HQ Series Shockwaves to control the height and damp the bumps. A front and rear MuscleBar, generically known as a sway, or antiroll bar, comes with the RideTech kit to tame pitch, roll, and yaw. At rear, tubular

StrongArms, Fox billet shocks, Firestone ’bags, and Panhard bar. Air supply and ride height are controlled via RideTech LevelPro.

Wilwood disc brakes are at all four corners managed with a fully polished un-boosted dual master cylinder. Steering starts with a CPP power steering kit connected to a CON2R custom color-matched steering wheel via



BY JOHN GILBERT
PHOTOGRAPHY BY JOSH MISHLER



CLARENCE GOT CLEARANCE

a Flaming River steering column. The wheels are U391 Rascals by US Mags mounted on 245/40ZR18 Continental ExtremeContact tires in front and 275/435ZR20 Continental ExtremeContact tires in the rear.

Underhood, Ronnie's Hot Rods went to great lengths to clean up the look of the LS1 engine and all that surrounded it. The inner fenderwells and shaved firewall were custom fabricated to align looks with the core support. Travis at Walker Radiator Works custom-built a smooth-tanked radiator to match. The LS1 engine, built by BB&T Racing, displaces 383 inches and produced 580 hp at 6,200 rpm. Engine internals consist of an Eagle crankshaft and rods, Mahle 9.8:1 pistons, and a Comp cam. The aluminum cylinder heads are from RHS (Racing Head Service).

The speed equipment necessary to produce that kind of power is



a dual-quad setup of FAST XFI Sportsman 1,375cc throttle bodies on a Holley EFI intake under a Ronnie's Hot Rods custom-made air cleaner. The ignition is a FAST EZ LS controller with Moroso Blue Max wires running from coil packs concealed in the fenderwells. Ronnie's custom fabricated the 1-3/4-inch mid-length headers that dump into Borla stainless steel mufflers.

Transmitting 580 hp produced by the LS engine begins with a TCI 4L60E StreetFighter with a TCI 2,500-stall converter and TCI SFI-approved billet flexplate. The floor shift is a Shiftworks button-top shifter, and the trans controller is a TCI-EZ. Stock, a '61 Chevy uses a two-piece driveshaft the X-frame was modified to convert to a one-piece driveshaft. The narrowed differential is Chevy 12-bolt with 3.73 gears.

All bodywork and paint was done



ELECTRIC-LIFE ACCESSORIES GIVE YOUR CLASSIC CAR MODERN CONVENIENCE AND LUXURY WITHOUT MODIFYING ITS CLASSIC LOOKS.



ELECTRIC REVERSE HOOD SYSTEM



DIRECT FIT POWER WINDOW KITS

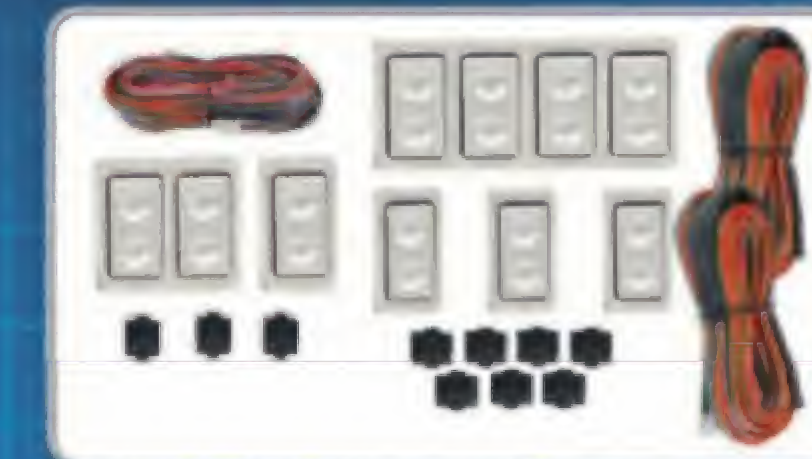
Custom Bolt on Power Windows for over 500 different vehicles.



Self aligning power windows for curved and straight glass. Made with Bosch / Rockwell motors! Lifetime Guarantee means QUALITY!



WIRE LOOMS TO PROTECT DOOR WIRING



BILLET SWITCH KITS



BEAR CLAW LATCHES WITH POWER OPTION



COMPLETE SHAVE DOOR HANDLE KITS, WITH 45 LB OR 60 LB SOLENOID OPTION



ELECTRIC DOOR LOCKS KEYLESS ENTRIES



OE STYLE CHROME SWITCHES



POWER WINDOW CRANK SWITCH



HEAVY DUTY SUICIDE HINGES



LINEAR ACTUATORS OVER 200 LBS. OF THROW!

Electric-Life uses ISO9001 certified components. OEM supplier to: Lamborghini, Ferrari, and Mercedes

800-548-2168
773-467-0200

WWW.ELECTRIC-LIFE.COM

CLARENCE GOT CLEARANCE

in-house at Ronnie's Hot Rods. The bubbletop was relatively rust free, but after soda blasting revealed a multitude of small rust holes it was necessary to fabricate sheetmetal to repair the rocker panels and related areas. Originally painted Roman Red by the factory with DuPont Magic Mirror acrylic lacquer, Clarence requested a mild color change to a much brighter Viper Red Ronnie's Hot Rods sprayed in Glasurit urethane. And naturally all of the body gaps are much tighter than a mass-produced '61 Chevy ever was. Dan's Polishing & Chrome did all of the chrome plating, including front and rear California one-piece bumpers.

In contrast to its factory original red-and-white interior and what is now in the bubbletop is the difference

between night and day. Over a bed of Dynamat laid in by Ronnie's the car was sent to Terry Mathis at Gulf Coast Trim & Upholstery for a four bucket seat interior with a full-length center console all custom-made by Terry. RideTech suspension controls and power window switches are concealed under a console sliding cover. The heavily reshaped front buckets are '62 Impala with scratch-built buckets for the rear. Flame Red cut-pile carpeting and sculpted red Italian Leather cover the interior and trunk.

Hung on a natural finish March billet aluminum serpentine belt system, the 12-volt electrical system begins with a March high-amp alternator fed into a Painless Performance universal muscle car wiring harness. Running front to

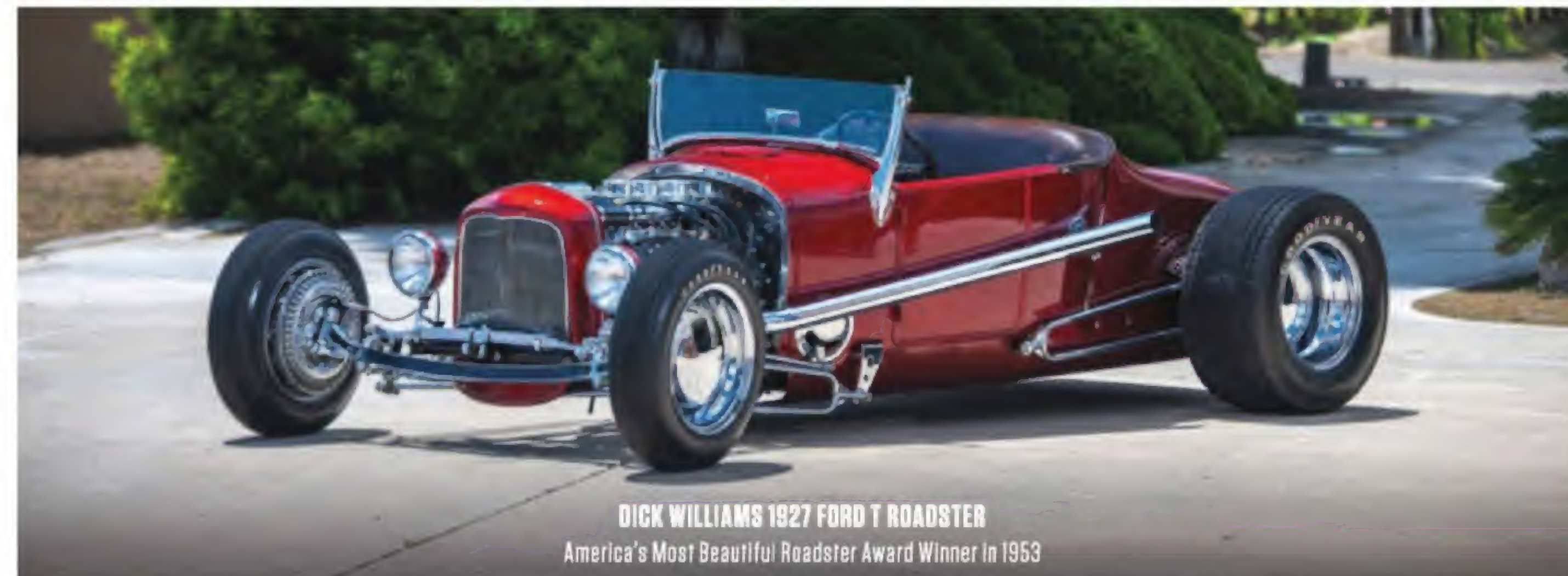
rear, the Painless harness supports lighting from Halogen headlights and LED taillights. The customized dashboard with a lot of 21st century features is based on a stock '61 Chevy. Dash instrumentation comes from AutoMeter gauges. The AutoMeter gas gauge measures the contents of a Rick's Tanks 18-gallon stainless steel tank supplying an Aeromotive Stealth electric fuel pump. A Pioneer AVH-X4800BS head unit with a 7-inch motorized display handles in-car entertainment, including a backup camera and Bluetooth.

After it was all said and done, Clarence told *STREET RODDER* the most memorable and rewarding moment was when the bubbletop debuted in the Builders Showcase at the NSRA Nats in Louisville, Kentucky. 📷



THE DAYTIME AUCTION **MONTEREY** AUG 15-17

HYATT REGENCY MONTEREY HOTEL & SPA • DEL MONTE GOLF COURSE • MONTEREY, CA



DICK WILLIAMS 1927 FORD T ROADSTER

America's Most Beautiful Roadster Award Winner in 1953

FROM THE BLACKIE GEJEIAN ESTATE COLLECTION



1928 FORD MODEL A ROADSTER "THE EMPEROR"

America's Most Beautiful Roadster Award Winner in 1960

NOW INVITING CONSIGNMENTS

MECUM
AUCTIONS

THE EXPERIENCE BEGINS AT MECUM.COM



[TECH]

BUILD

Nip and a Tuck

Hollywood Hot Rods Begins Working Their Magic on Our '55 Ford

By Ron Ceridono

Photography by Tim Bernsau

Troy Ladd of Hollywood Hot Rods (HHR) has become one of the most prolific builders on the street rod scene. After the doors of his new shop swung open in 2002 it didn't take long for the Newport Beach, California, native to make a name for himself. HHR soon became known for award-winning vehicles, including America's Most Beautiful Roadster and a long list of magazine feature cars, all thanks to Troy's eye for period-correct hot rods and customs and the workmanship he and his talented crew are now famous for.

We're proud to say HHR will be building the 2019 ARP/STREET RODDER Road Tour car presented by Ford Performance. Having been responsible for two previous STREET RODDER Road Tour cars ('40 Ford in 2012 and '61 Ford Sunliner in 2015), HHR is no stranger to what's involved in building a car that has to be a combination beauty queen and brawler—something with the fit and finish of a show car while being tough enough to rack up 20,000-plus miles in a summer. This year's car is a '55 Ford Customline two-door sedan that will be riding on the Roadster Shop



1 Starting at the rear, HHR's Peyton Timm begins modifying the rear bumper to closer to the contour of the body.

Troy Ladd (fourth from the left) and his crew are working their magic on the ARP/STREET RODDER '55 Ford.

chassis and powered by Ford Performance Coyote crate engine.

The HHR crew began transforming the Road Tour Ford from stocker to street rod by removing the body from its original frame, media blasting and priming all the sheetmetal, and then hanging it all in place on the Roadster Shop chassis. Then it was time to begin the subtle modifications that HHR is known for. One of the first was tucking in and smoothing the rear bumper. And as with most things that seem simple, this wasn't.

After fabricating temporary brackets the



2 The original gap between the body and bumper was quite large. To allow them to come closer together, the sheetmetal flange at the back of the body had to be trimmed.

bumper bolted in place and a number of cuts were made that allowed the bumper to be reshaped, making it fit tighter to the body. Once the bumper was reshaped, the cuts were welded, the mounting and bumper guard holes were filled, and the temporary mounting brackets were replaced with a pair that are much more substantial. Finally all the welds were ground smooth in preparation for chrome plating.

Ladd and the entire crew at HHR put extra effort into every detail of the cars they build—the lengths they go are extraordinary, but the results speak for themselves. For more information on the 2019 ARP/STREET RODDER Road Tour, check out hotrod.com/events/street-rodder-road-tour/.

Source It

Automotive Racing Products
(800) 826-3045
arp-bolts.com

Ford Performance
performanceparts.ford.com

Hollywood Hot Rods
(818) 842-6900
hollywoodhotrods.com

Roadster Shop
(847) 949-7637
roadstershop.com

Driving Your Hot Rod Should Be A Pleasure.

Mike Braswell's Bad Black Willys
Built By Detroit Speed



TEXAS
made
COOL!

43 YEARS

Proven Technology From The Most Trusted Name In Performance Air Conditioning



For over forty years our goal has been to bring all-season comfort and reliability to rod and custom enthusiasts. And we know that installing air conditioning may seem complicated to the average car owner. But our factory trained distributors have years of experience guiding rodders through the simple steps of selecting just the right combination of system components and controls to complete your cus-

tom installation. If you have a good collection of hand tools and some experience with modifications, like a cam or carburetion, your installation will be a straight ahead project.

Vintage Air Systems Are Built To ISO 9001:2008 Quality Standards

No matter what type vehicle you are wanting to air condition, Vintage Air has the experience and components to get the job done right. Plus, if you should need additional advice, we have a full time technical staff ready to help. Call today to discuss your project.

Complete Catalog Online At:
www.vintageair.com

PRODUCT INFORMATION LINE:

800.727.7094



Gen-IV is a trade name of Vintage Air Inc.





11 The additional cuts allowed the ends of the bumper to be pulled closer to the quarter-panel.



12 Satisfied with the shape, the ends of the slits were tack-welded.



13 With the fit to the body verified as correct, the slots that had been cut were welded, first from the back, then from the front.



14 Layout fluid was used as a guidecoat to reveal high and low spots in the bumper.



15 Just like preparing a body for paint, the bumper was sanded with a DA and a sanding block to prepare for chrome plating.



16 After blocking, the high and low spots became obvious; note the circled H.



17 Just like bodywork, the high and low spots are corrected with a hammer, albeit a heavier hammer.



18 The edges of the bumper were also worked over with a hammer and dolly. They were rough from the factory.



19 An abrasive disc on an air grinder was used to knock off any sharp edges along the top and bottom of the bumper.



20 To fill the mounting and bumper guard holes plugs were cut and welded in place.



21 Once the plugs were welded they were ground smooth. Plugs like this should always be welded on both sides.



22 It's hard to tell if this bumper was twisted during use or it came from the factory that way. The driver side had a 1/16-inch high spot.

12" DISC BIG BRAKE KITS

LARGEST BRAKES FOR 15" OR BIGGER WHEELS!

- Big 12" Front 1-Pc. Rotors
- Large GM Loaded Calipers
- 2" Drop Spindle Kit with Built-in Steering Arms & Integrated Caliper Brackets
- Front Bearings, Seals, Dust Caps & Spindle Nuts
- Rubber Brake Hose Kit
- Installation Hardware

12" BRAKE KIT WITH 2" DROP SPINDLES starting at \$409/kit

SPINDLES ALSO AVAILABLE SEPARATELY

DUAL ADJUSTABLE TUBULAR CONTROL ARMS & COIL-OVER KITS

- Totally Tubular™ Upper & Lower Control Arm Set
- Dual-Adjustable Front Coil-Over Conversion Kit
- Spanner Wrench & Thrust Bearing Kit
- Patented D-Spec Performance Bushings

UPPER & LOWER CONTROL ARMS W/ COIL-OVER KIT starting at \$1179/kit

UPPER & LOWER TUBULAR CONTROL ARM SET starting at \$733/set

FRONT COIL-OVER KIT ONLY starting at \$449/kit

COIL-OVER CONVERSION KITS

- REAR KIT** Specially designed, USA made mounting brackets. Includes springs & hardware. starting at \$569/kit
- DUAL ADJUSTABLE BOLT-IN INSTALLATION**
- FRONT KIT** Specially designed conical springs (350, 450, or 550 spring rates available) & all mounting hardware. starting at \$449/kit

BOTH KITS INCLUDE SPANNER WRENCH & BEARING KIT!

FOR MOST POPULAR CAR APPLICATIONS

CLASSICPERFORM

GET CONNECTED.

CLASSICPERFORM.COM

5% OFF *PROMO CODE: SRM19 FOR A LIMITED TIME ONLY! *YOUR TOTAL ORDER, ON CPP PRODUCTS ONLY

CATALOG! SCAN OR CODE TO DOWNLOAD!

MUSTANG II IFS TRUE PERFORMANCE SYSTEMS



FOR 1937-59 CHEVY TRUCKS & 1935-41 - 1948-60 FORD TRUCKS

THE ULTIMATE IFS PERFORMANCE PACKAGE INCLUDES ALL 3 KITS starting at \$2199/kit

KITS AVAILABLE SEPARATELY

1. COMPLETE TRUE IFS KIT

- 11.75" Performance Brake Kit with CPP Big Bore™ Calipers
- Forged Aluminum Hubs
- Manual or Power Rack & Pinion
- Performance Sway Bar
- Stock or Drop Modular™ Spindles
- Powdercoated Tubular Control Arms
- Powdercoated Coil Springs
- Performance Gas Shocks
- Mounting Hardware

2. REAR LEAF CONVERSION KIT

- 2" Drop from Stock
- Leaf Springs
- Shocks
- Shackles Kit
- U-Bolts
- Axle Plates
- Brake Booster
- Mounting Brackets
- Pedal Linkage
- Prop Valve

3. FRAME MOUNT MASTER CYLINDER/BOOSTER KIT

BOOSTER COMBOS starting at \$299/kit

REAR LEAF KITS starting at \$655/kit

5% OFF *PROMO CODE: SRM19 FOR A LIMITED TIME ONLY! *YOUR TOTAL ORDER, ON CPP PRODUCTS ONLY

CATALOG! SCAN OR CODE TO DOWNLOAD!

CLASSICPERFORM.COM

500 Series™ POWER STEERING BOXES starting at \$379/kit

HYDRA STOP HYDRAULIC ASSIST SYSTEMS & BARE UNITS

Upgrade Your Manual or Vacuum-Assisted Brakes

- High-Quality — Direct Bolt-In Unit
- Ideal for Engines Producing Low Vacuum or Large Cam Applications
- Aluminum Master Cylinder w/Prop & Stop Block Kit (Upgrade Options Available - Including Wilwood)
- Pressure & Return Hose Kits
- Mounting Hardware

BOOSTS UP TO 80% MORE BRAKE CLAMPING FORCE!

FOR POPULAR APPLICATIONS

NO VACUUM? NO PROBLEM!

STREET BEAST™ SYSTEM starting at \$829/kit

HYDRAULIC ASSIST BARE UNIT ONLY starting at \$469/kit

100% BRAND NEW! NOT RE-BUILT

FIREWALL OR FRAME MOUNT starting at \$299/kit

APPLICATION SPECIFIC & UNIVERSAL KITS

UNIVERSAL / STREET ROD starting at \$209/kit

POWER STEERING BOXES & KITS

500 Series™

- Late-Model Power Steering Technology
- Perfect Alignment with the OE or Aftermarket Steering Column
- All Power Boxes Use Inverted Flare Hoses

FOR ALL POPULAR APPLICATIONS

500 SERIES™ POWER STEERING BOXES starting at \$379/kit

CONVERSION KITS starting at \$599/ea

100% NEW UNIT! NOT RE-BUILT

14:1 SPORT RATIO!

1955-57 TRI-FIVE OE STEERING COLUMN

NEUTRAL SAFETY SWITCH

LOWER DETENT KIT

SHIFT ARM

For All Common 3 & 4 Speed Automatics

Works with Both Stock & Reproduction Upper Shifter, Turn Signal Housing & Factory Shift Indicator Rod

FOR CHEVY TRI-FIVE starting at \$169/ea

CLASSIC PERFORMANCE PRODUCTS, INC.



NEW FOR TRI-FIVE!

FRAME COMPONENT KITS

BASIC KIT

1955-57 CHEVY TRI-FIVE

UPPER OE-STYLE CONTROL ARMS w/ 5° Caster & Rubber Bushings

LOWER OE-STYLE CONTROL ARMS w/ Rubber Bushings

RUBBER UPPER & LOWER CONTROL ARM BUMP STOPS

FRONT STOCK OR LOWERED COIL SPRINGS

STOCK HEIGHT SPINDLES

STEERING ARM SET

COMPLETE STEERING LINKAGE KIT

500 SERIES™ POWER STEERING BOX

REAR SHOCK CROSSMEMBER

REAR STOCK OR LOWERED LEAF SPRINGS with Shackles & Bushings

BASIC KIT starting at \$1,999/kit

MORE UPGRADES & ADD-ONS AVAILABLE

BASIC PLUS+ KIT

INCLUDES ALL BASIC KIT COMPONENTS PLUS:

• 11" Front Disc Brake Kit

• Front/Rear Classic Fit™ Nitrogen Gas Performance Shocks

• Upgrade to PolyPlus™ Control Arm Bushings

• Front Sway Bar Kit

• Complete Leaf Spring Relocation Kit

• Rubber Engine Mounts

• Transmission Crossmember

starting at \$3,199/kit

DELUXE KIT

INCLUDES ALL BASIC PLUS+ KIT COMPONENTS PLUS:

• 11" Rear Disc Brake Kit

• Totally Tubular™ Upper Control Arms Upgrade

• Totally Tubular™ Lower Control Arms Upgrade

• Rear Sway Bar Kit

starting at \$3,599/kit

PERFORMANCE KIT

INCLUDES ALL DELUXE KIT COMPONENTS PLUS UPGRADES:

• 13" Front Big Brake Kit

• 12" Rear Big Brake Kit

• Front Dual-Adjustable Coil-Over Conversion Kit

• Rear Dual-Adjustable Aluminum Body Shocks

• Stainless Brake Hoses

• PolyPlus™ Engine Mounts

• PolyPlus™ Transmission Mount

starting at \$5,499/kit

ALL-IN-ONE STEERING, BRAKES, & SUSPENSION PACKAGES FRONT TO REAR!

378 E. Orangethorpe Ave. Placentia, CA 92670

Prices subject to change without notice. * Please note that kits and prices may vary between certain applications.

Steering/Brakes/Suspension

800-760-8536



23

■ On the passenger side there was an 1/8-inch high spot.



24

■ A little brute force and the high spots were eliminated.



25

■ With the bumper back on the car the top edge was marked for trimming to make the gap uniform all the way across.



26

■ The exact contour of the bumper was laid out in wide masking tape then 1/4-inch tape was laid down next to it and the wide tape removed.



27

■ The top edge of the bumper was trimmed adjacent to the 1/4-inch tape with a variety of tools—a reciprocating saw, grinding disc, and drum sander.



2.3L ECOBOOST
M-6007-23TA
310 HP

X2-347CI
M-6007-X2347DR
360 HP

572CI BIG BLOCK
M-6007-572DF
655 HP

GEN3 5.0L COYOTE
M-6007-M50C
460 HP

GEN2 COYOTE POWER MODULE
M-9000-PMCM
435 HP



5.2L ALUMINATOR
M-6007-A52XS
580 HP

ENGINEERED. TESTED. CRATED.

For more than 35 years Ford Performance Parts has been producing and developing performance parts with enthusiasts in mind. Whether you are building from the ground up or working to get that extra tenth of a second Ford Performance delivers the products you need. We're proud to offer a range of crate engines suitable for a variety of applications and performance components that are designed and engineered to rigorous Ford Performance standards. As a result, our parts and components are proudly affixed with the Ford oval.

FIND ALL THE POWER YOU NEED AT
PERFORMANCEPARTS.FORD.COM





28

After the temporary brackets were removed from the bumper a much more substantial pair took their place.



29

To attach the bumper to the frame a pair of replacement arms was made from hot rolled flat strap.



30

The Roadster Shop chassis came with bumper bracket holes in the stock location.



31

The modified bumper is held securely in place with the stout steel brackets.



33

It took a considerable amount of time and effort to fit the bumper to the body and fill all the holes, but it will be worth it. From HHR both bumpers will be shipped to Sherm's Custom Chrome Plating.



32

It took some time and effort but the bumper now fit tight to the body with an even gap from one end to the other.

Hagan
Street Rod Necessities

Your Street Rod Makes A Statement About You



Owner: Greg P
32 Ford

Greg's Statement : I'M A BAAAD MAN!

Make YOUR Statement With Quality Parts From Hagan Street Rod Necessities
Shop Online 24/7: www.haganauto.com

Fatties Superview Mirrors



Rectangle
4-1/2"x1-3/4"



Oval
4-1/2"x1-3/4"



Round
4" and 3-1/2"

Fuel Doors

Use With Steel Or Fiberglass



45 flat



90 TDC

Many options and styles available (along with a product selection guide) at our website

Hidden/ Suicide Hinges



Available For 1930's Thru 1950's Vehicles

CNC machined and tig welded construction

30s -50s Frenched Headlight Kits



Flush Mount Light Kits

Designed To Be Sanded Down To Match Your Panel



Many styles and options available at our website.

Other Available Products

- 1928 - 1932 Ford Hoods and side panels
- Tri Opening Hood Hinge System
- Glass Run Channel
- Window Sill Replacement and Weather Strip
- Interior Door Panel Kits

Too many more to list!!!
See our Website for all our products
www.haganauto.com

Hagan
Street Rod Necessities



TOLL FREE LINE: 888-464-2426
www.haganauto.com



feature

FORDOR TO THE PAST

THIS DEUCE SEDAN IS A RIDE THROUGH TIME

If science ever produces a time travel machine we'll be ready. We've already got our first trip planned. Sell us a ticket to 1959, destination: Bakersfield, California. We want to be there to watch Art Chrisman and Don Garlits at the first U.S. Fuel & Gas Championships at Famoso Raceway. We also want to find a high school kid named Jim Lindsey who was one of the local hot rodders and a true gasoline-in-his-veins gearhead.

BY TIM BERNSAU
PHOTOGRAPHY BY JORGE NUÑEZ

"Bakersfield back then was like *American Graffiti*," the 2019 Jim Lindsey told us, "and we had our John Milners. I grew up buying cheap Model As and Deuces. By the time I graduated from high school I'd already owned 8 or 10 cars, and didn't pay more than \$125 for any of them."

In the decades since, Jim has owned many other cool cars, including woodies, wagons, roadsters, coupes, sedans, deliveries, and pickups. Many of them have been '32 Fords, including the five-window coupe that was his second car (and that he still owns) and this four-door sedan that is his latest addition.

"I had been talking to Roy Brizio about building a closed car," Jim told *STREET RODDER*. "In 1976 or 1977, I'd sold a dirt bike engine to buy a '32 Fordor and have always liked them. It turns out that Roy had another customer who'd sold him a body." That body became the starting point of the finished car you see here.

"I like stock-bodied cars," Jim says. "I like fenders and original lines and I-beams." Those preferences align with the style that Roy Brizio Street Rods is famous for. The original steel sedan body of Jim's sedan was kept stock and unchopped, with exterior pieces collected from the





FORDOR TO THE PAST

restoration aftermarket. The factory grille shell frames a Dan Fink insert, followed by a Rootlieb 25-louver steel hood. The front and rear bumpers, door handles, and taillights are out of the Bob Drake Reproductions catalog. SO-CAL Speed Shop supplied the swan neck side mirrors.

"Picking the right color is the hardest part of the project," Jim says. After seeing a deep maroon '34 Vicky at Brizio's he realized it was the perfect color for the body. Darryl Hollenbeck at Vintage Color Studio massaged the 87-year-old sheetmetal until it was better than new, then finished it in a similar maroon, custom mixed with PPG paint. Flawless chrome from Sherm's Custom Plating is the exterior's finishing touch.

Brizio created a fully boxed reproduction Deuce frame for the sedan. The traditional frontend features the Super Bell I-beam axle that Jim likes, plus hairpins, spindles, and tubular shocks from Pete and Jakes. In back, a 9-inch Currie rear with 3.70:1 gears and a limited-slip differential spins Currie axles. Pete and Jakes ladder bars and Panhard bar, a Deuce Frame Company antiroll bar, and QA1 coilovers suspend the rearend.

The classic 16x6 and 16x7 wire wheels from The Wheelsmith match the old-time flavor of the Fordor, and the vanilla paint (with chrome caps and rings) contrasts



the body color. Excelsior 5.50R16 and 7.00R16 radials from Coker Tire wrap around the rims. Braking is traditional too, with 11-inch drums mounted at each wheel.

"I'm an engine guy. The car had to have horsepower and it had to have three pedals." Jim's first requirement is answered by approximately 385 horses from a fresh Chevrolet Performance 350ci crate motor. The brand-new engine is dressed up vintage style with a raw-finish finned air cleaner from Moon and a pair of PML Corvette-style valve covers. An Edelbrock carburetor and manifold feed air and fuel, an MSD ignition system and Taylor wires provide the fire, and Sanderson headers, Brizio-

Classic Street Rod Style

MODERN RIDE,
PERFORMANCE
& COMFORT

POL Customer Bob Rotondo's
1958 Chevy Yeoman

1,000s OF BRAKE, SUSPENSION & STEERING UPGRADES FOR YOUR CLASSIC ROD

Brakes



Fuel Tanks & EFI



Suspension



Engine Mount Kits



Steering



Power Brake Boosters



Proud to carry these quality brands and MORE!

ridetech

BORGESON

ididit

Currie

Wilwood

FiTech

Over 30 years of design
and fabrication experience!



Call us at: 866.456.5335

Order online at: PerformanceOnline.com

1931 Sampson Ave., Corona CA 92879



5% OFF
USE PROMO CODE:
SR5

FORDOR TO THE PAST

built pipes, and Stainless Specialties tube mufflers carry away the exhaust. A Walker brass radiator, SPAL electric fan, and Edelbrock water pump keep the engine cool. A TREMEC TKO 600 five-speed transmission backs up the small-block and meets Jim's three-pedal requirement.

Some of the maroon paint from the exterior found its way inside the car, coloring the shifter knob on a Lokar handle, the ididit steering column, and the Juliano's Hot



Rod Parts banjo wheel. A five-gauge set from Classic Instruments' Nostalgia VT series mounted in the original dash monitors speed, temperature, oil pressure, fuel level, and battery voltage. Jim and his passengers enjoy the ride from the comfort of bench seats from Glide Engineering, upholstered in gray leather, and cloth by Sid Chavers. Wilton wool carpet covers the floor. A Vintage Air A/C system cools every corner of the expansive sedan interior.

Jim lives in Santa Barbara now—150 miles and 60 years from the Bakersfield of his *American Graffiti* days. He's always looking to the future, thinking about what his next street rod will be—but when he's driving his new '32 four-door sedan, or his old five-window coupe, or any one of the five or six other cars he currently owns, it's like a trip back to the past. All it takes is a time travel machine like this one. 📺



**Mariani Bros.
1929 Ford Sedan**

Built by Rad Rides by Troy
Triple Crown "Best Street Rod"



Stewart Adams' 1969 Camaro "TUX"

Built by Kyle Tucker & Detroit Speed
SEMA, Goodguys & Triple Crown winner



Bruce Ricks' 1963-1/2 Ford Galaxie

Built by Steve Cook Creations
Triple Crown "Best Street Cruiser"



Bob Florine's 1957 Ford "Thumper"

Built by Steve Strope/ Pure Vision
Street Rodder's "Street Rod of the Year"

The Award Winners Rely On ARP Fasteners

You'll find ARP fasteners employed by the nation's top builders in a variety of applications. After all, they're unbeatable in terms of fortifying an engine, drivetrain, chassis and suspension for total reliability.

Moreover, ARP's polished stainless steel or black oxide 8740 chrome moly bolts provide the

finishing touch for underhood and undercar use. Both are rated at 180,000 psi tensile and much stronger than Grade 8 hardware.

With over 4,700 fastener kits, ARP likely has what you need. And if you don't see it in the new 2019 catalog (available online or a free printed copy sent upon request) ARP can probably make it.



ARP
automotive Racing products



THE RIGHT ONE

JOHN AND PAT MILLER'S SPECIALLY CRAFTED DEUCE ROADSTER



feature

Some might say that there are only so many ways to creatively build a '32 Ford roadster and that mail-order hot rods are often lacking any personal style. The hot rod on these pages is anything but boring, and it proves that you can build a traditional and tasteful car with off-the-shelf parts. Blending the right combination of parts, colors, and textures is an art, and guys like Chad Adams make it look easy. Chad and his crew at Adams Hot Rod Shop in Rydal, Georgia, focus mostly on '32 Ford roadsters, building them for customers, and producing turnkey cars to sell. The example shown here is a custom build for John and Pat Miller, who hail from Blacklick, Ohio, just outside of Columbus.

Since the Millers are from the home state of the "Ohio look" they've been accustomed to seeing hot rods with the perfect stance and attitude. John had owned muscle cars, custom motorcycles, and other specialty vehicles, but he was ready to enter the street rod world with a '32 Ford roadster. The plan was to find the right car at a rod run and buy it ready to run. While this is often the cheapest way to go about acquiring a pre World War II car, John struggled to find a car that checked all of the boxes on his list of preferences. He and his wife, Pat, were walking around thousands of candidates at the NSRA Street Rod Nationals back in 2015 when the couple hit a turning point in their search for the perfect car. Pat said, "The roadster you want doesn't exist ... you need to have one built. It's the only way

BY TOMMY LEE BYRD
PHOTOGRAPHY BY THE AUTHOR

PPG PREMIUM ROD OF THE MONTH



THE RIGHT ONE

you will ever get exactly what you want." John agreed, even though he enjoyed the thrill of the chase.

Through their travels to Goodguys Columbus, the NSRA Street Rod Nationals, and other rod runs John was impressed with the roadsters that were coming out of Adams Hot Rod Shop. The high level of quality and creativity sealed the deal, and John commissioned Chad and crew to build the roadster he wanted. John knew that Chad had the vision for stance and profile, so he let the Georgia boys run with it. Every piece of the car was built at Adams Hot Rod Shop, including the chassis fabrication, paint, and interior.

The car sits on a custom chassis built by Dennis Elmore, one of Chad's longtime employees and friends. He used American Stamping '32 Ford framersails with custom crossmembers to dial in the stance

and mount the drivetrain. Up front is a SO-CAL Speed Shop dropped and drilled front axle, attached to the frame with a chrome reverse-eye spring and hairpin radius rods. A Vega box simplifies the cross-steering setup and Wilwood disc brakes are concealed by finned Buick-style drums.

Out back, a polished stainless steel four-bar suspension mounts the Winters V-8 quick-change rearend. Slick, black axle tubes accompany the beautifully polished centersection, and the whole assembly is sprung by Aldan coilovers. Rolling stock consists of Firestone bias-ply tires from Coker Tire, sized at 450/475-16 up front and 750-16 out back for the perfect amount of rubber rake. The piecrust blackwall tires mount to 16x4.5 and 16x7 Hot Rod Steel wheels, also from Coker Tire. Chad and

crew painted the outer edge of the '40 Ford DeLuxe center caps black, leaving only the centersection with a chrome-plated finish—a unique touch on this sinister hot rod.

Horsepower comes from a BluePrint Engines 383ci stroker small-block Chevy. While the black appearance makes the engine all but disappear beneath the hood of the Deuce roadster, the sneaky small-block packs a punch with 420 hp and 440 lb-ft of torque on tap. The stroked small-block features 10:1 compression, aluminum cylinder heads, and a hydraulic flat-tappet camshaft for a simple, bulletproof combination. Up top is an Edelbrock dual-plane aluminum intake manifold, a Holley HP 750-cfm double-pumper carburetor, and a custom air cleaner by Johnson's Hot Rod Shop. Ignition is handled by a PerTronix

COMPACT TANDEM MASTER CYLINDER

PRODUCT FEATURES

- New compact design is ideal when space is limited in the engine compartment
- High-strength, lightweight, die cast aluminum body
- Four bore sizes available (7/8", 15/16", 1" and 1-1/8")
- 7/8" and 15/16" bore models include integral pushrods for manual pedals
- 1" and 1-1/8" bore models can mount to power boosters or be used with a captured pushrod on manual pedals
- Available in black or bright media burnished finish



KITS ALSO AVAILABLE:

- Master cylinder
- Integrally mounted combination proportioning valve w/ bracket
- Pre-bent stainless steel lines

POWER. CONTROL. PRECISION.
805.388.1188 | www.wilwood.com
Designed, Tested, and Manufactured in the USA

DISC BRAKES
wilwood

THE RIGHT ONE

Flame Thrower distributor, while the charging system operates with a low-mount alternator run by a good old-fashioned V-belt. A pair of stainless steel block-hugger headers from Ultimate Headers lead into a 2-1/2-inch exhaust system by Dennis Elmore. A PRC radiator keeps the small-block cool, while a Transmission Unlimited prepared TH350 automatic sends the power to the ground.

The ultra-slick highboy roadster features a Brookville steel body, with a few custom touches, including a Dick Rodwell windshield and '50 Pontiac taillights. It's simple and sleek, and the highly reflective finish is the product of Chad Adams and Dion Willcox, who straightened and aligned the panels to perfection. The PPG basecoat is straight mixing black, buried under several coats of clear, giving the boys plenty of material to sand, buff, and polish. Chastin Brand laid down some subtle pinstriping to put the perfect finishing touch on the black roadster.

The interior was a combination of efforts, with Jamie Crook handling the stitchwork and Chad Adams on the fabrication and final assembly. The Relicate Leather material features a custom brown hue and covers the scratch-built seat and interior panels. Chad gave the '32 dash a marble look

with a custom-mixed color, and gave the same treatment to the LimeWorks '40 Ford steering wheel. The Classic Instruments gauges are traditional and stylish, and Chad added a column-mounted tachometer for an old-school detail. This hot rod doesn't have a heater, air conditioning,



stereo, or any other creature comforts, so electronics are limited. A simple wiring harness from Rebel Wire ties it all together.

As the roadster began to take shape, the idea to make the haul to Pomona for the Grand National Roadster Show came up in. A dream trip for both the builder and the owner became a reality in January

2018, as the fresh roadster rolled into Building 4 as a part of the America's Most Beautiful Roadster competition. Another accomplishment included displaying inside the Builder's Showcase at the NSRA Street Rod Nationals in Louisville, Kentucky. While the accolades of owning a '32

Ford of this caliber are great, the real victory is sliding behind the wheel. The guys at Adams Hot Rod Shop build high-end cars, but they never lose sight of the fun factor, which is driving them. And while John Miller's search for the perfect Deuce roadster is over, he and Pat are ready for some open-air cruising in their bad, black highboy hot rod. 📺



Now in its 24th year, the Road Tour continues to improve, with trips to some of the biggest and most popular rod runs and automotive events in the United States, and stops at aftermarket performance parts manufacturers, auto museums, private car collections, and well-known rod shops. Jerry Dixey will lead the Tours in the STREET RODDER 1955 Ford Custom built by Troy Ladd and the crew at Hollywood Hot Rods.

Join one or more of the 24th ARP/STREET RODDER Road Tours presented by Ford Performance. VISIT STREETRODDER.COM TO REGISTER.



EVENT SPONSORS



2019 ROAD TOUR SCHEDULE



JUN 15 - 22

MSRA Back to the 50's Week Tour
St. Paul, Minnesota



AUG 31 - SEPT 7

Shades of the Past Tour
Nashville to Pigeon Forge, TN



JUL 14 - 21

Syracuse Nationals Week Tour
Syracuse, NY



OCT 4 - OCT 12

Cruisin' the Coast Tour
Biloxi, MS



JUL 26 - AUG 4

Speedway Motors Tour
Lincoln, NE to Louisville, KY



OCT 6 - OCT 12

Vintage Air Tour
San Antonio, TX to Biloxi, MS

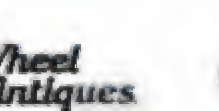
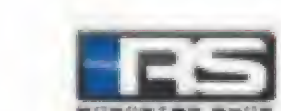
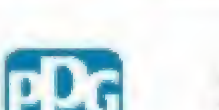
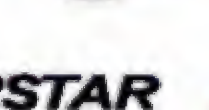
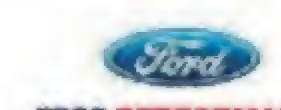
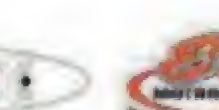


AUG 12 - AUG 17
AMSOIL Woodward Dream Cruise Tour
Detroit, MI



OCT 13 - OCT 20
East Meets West Sherm's Plating Tour
Lake Havasu City, AZ

PRODUCT SPONSORS





[TECH] UPGRADE

Feeding the Beast

Installing a Top End on
Our 383ci Stroker Engine

By Evan Perkins Photography by the Author

In the last edition of our budget brawler buildup (Aug. '19 issue), our humble 350 was torn down and treated to a K1 stroker crankshaft, Wiseco forged pistons, and K1 connecting rods. In this installation we'll finish the job by installing an Isky camshaft, a pair of Edelbrock cylinder heads, and an Edelbrock manifold, topped by a high-tech FiTech fuel injection system.

The engine is destined for a heavy, classic cruiser so the focus of the build was low-end torque. The plan was to keep the engine docile but add just enough extra compression, cam, and head flow to bump up the torque and the fun. The cylinder heads remain the same Edelbrock Performer units the engine utilized in its former life as a 350, but the higher lift of the Isky camshaft and displacement bump of 33 ci should help the engine make more grunt upstairs and down.

Follow along as we ice the cake that is our 383 and let it rip on the dyno at Westech. 📺

Manufacturing Quality Steering Components since 1914

STEERING UNIVERSAL JOINTS, SHAFTS, VIBRATION REDUCERS & SUPPORTS



BRAND NEW OEM SAGINAW MANUAL STEERING BOXES



OEM VEGA 140

OEM 525 SERIES

SIDE-STEER GEAR

OEM 63-82 CORVETTE

MODERN QUICK RATIO POWER STEERING CONVERSIONS



55-64 CHEVY FULL SIZE CARS

52-79 FORD FULL & MID SIZE CARS



65-73 MUSTANG



63-82 CORVETTE



62-82 MOPAR



62-72 NOVA

- Modern Quick Ratio Power Steering Box
- Complete Kits or Individual Components
- No Leaky Control Valve or Slave Cylinder
- Full Turning Radius/No Bump Steer
- Easy Half Day Bolt-in Installations
- Complete Kits Starting at Only \$745.00

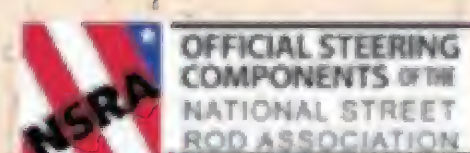


Corvette Kit #999032 Shown \$745.00

Find out more!!! Visit us at...

www.borgeson.com

Borgeson Universal Company
9 Krieger Drive
Travelers Rest, SC 29690
860-482-8283



BORGESON

Steering You Forward

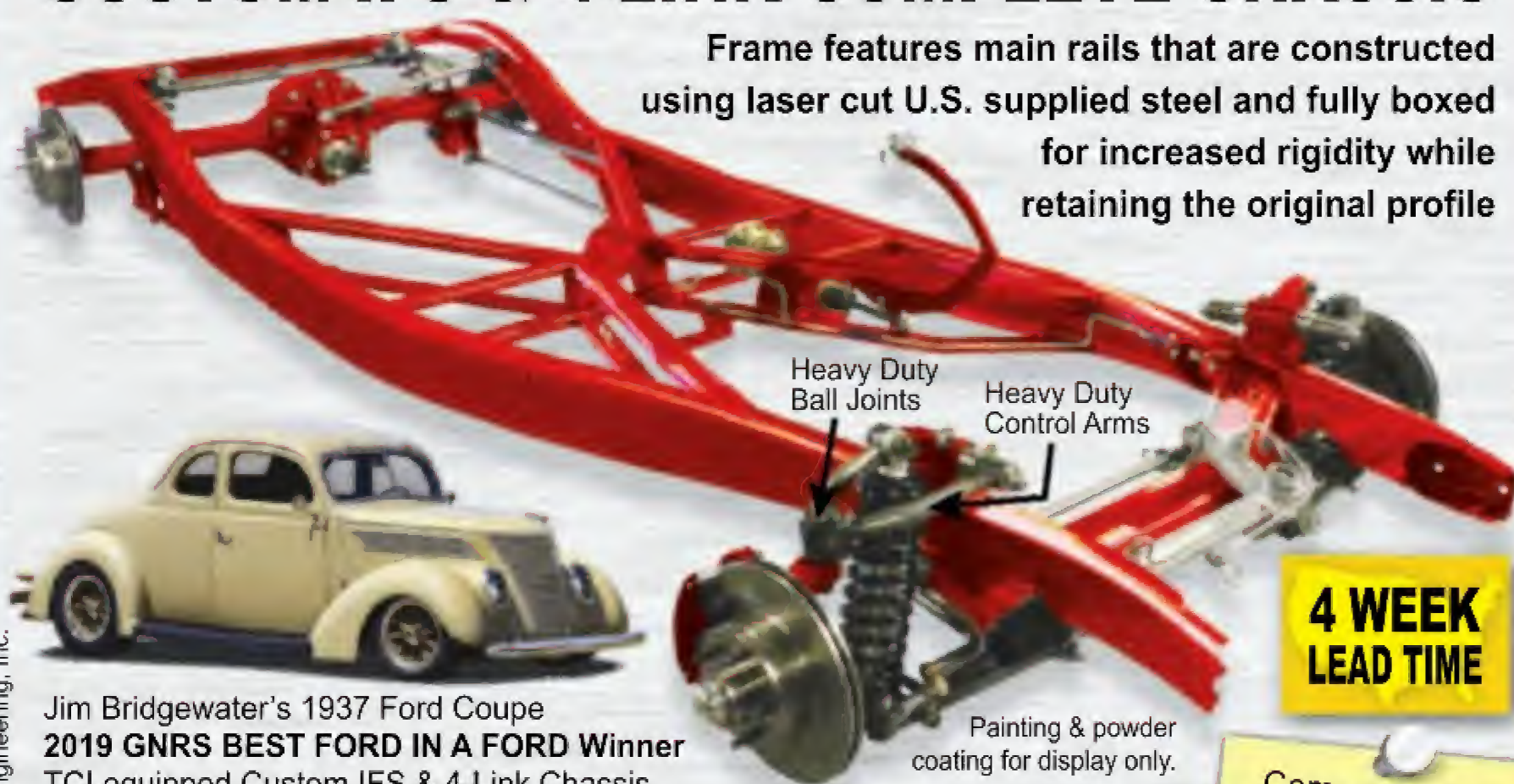
ENGINEERING THE PERFECT RIDE FOR 45 YEARS

"In 1974, we made a promise: To partner with each customer to help them build the perfect ride. Comfort, performance and safety is at the heart of every part we manufacture—always has been, always will be—that's our promise to you." - Ed Moss, Founder & President



INTRODUCING 1935-40 FORD CAR & '35-41 TRUCK CUSTOM IFS & 4-LINK COMPLETE CHASSIS

Frame features main rails that are constructed using laser cut U.S. supplied steel and fully boxed for increased rigidity while retaining the original profile



Jim Bridgewater's 1937 Ford Coupe
2019 GNRS BEST FORD IN A FORD Winner
TCI equipped Custom IFS & 4-Link Chassis



DUAL WARRANTY
LIFETIME WARRANTY
ON TCI MANUFACTURED ITEMS
6YR/60K MILE WARRANTY
ON WEAR & TEAR ITEMS

Come see us at
NSRA Louisville &
Goodguys Columbus
Celebrating
TCI 45th with
Special Show
GIVEAWAY!

Call Now for Our 45th Celebration Specials!

800.984.0884

Call or Go Online For A FREE Catalog

TotalCostInvolved.com

1416 Brooks St., Ontario, California

Building driven dreams...

American made steel 1927 bodies to fit
1932 frames. Longer,
taller, wider.
1932 frame
rails to complete
chassis full roller packages
Suspension & hardware parts available.



Shadow Rods LLC • 5400 North Michigan Road • Saginaw, MI 48604
989.754.1927 • Fax 989.754.1928
www.shadowrods.com • email: info@shadowrods.com

TECH UPGRADE



1 Our camshaft is from Isky Racing Cams (PN 201272-282) and has 225/234 degrees of duration at 0.050-inch lift. Lift comes in at 0.505 on the intake and 0.530 on the exhaust, while the lobe separation angle is a fuel injection-friendly 112 degrees.



2 The cam was liberally coated in assembly lube and slid into the engine block.



3 The timing chain, gears, and thrust button were installed. These were low-hour items, so we decided to reuse them.



4 Even though the timing set and thrust button were reused, it is always good practice to check camshaft endplay. Too loose and the ignition timing will be erratic. Too tight and you run the risk of severe engine damage.



5 Next, we lowered in the hydraulic roller lifters, which were soaked overnight to ensure they were filled with oil.

Source It

**Automotive
Racing Products**
(800) 826-3045
arp-bolts.com

Comp Cams
(800) 999-0853
compcams.com

Edelbrock
(888) 799-1135
edelbrock.com

FiTech
(951) 340-2624
fitechfi.com

Isky Cams
(310) 217-9232
iskycams.com

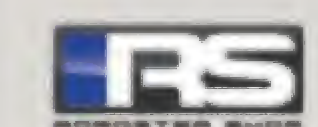
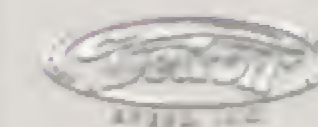
K1 Technologies
(440) 497-3100
k1technologies.com

Summit Racing
(800) 230-3030
summitracing.com

Wiseco Pistons
(800) 321-1364
wiseco.com



**Top Builders
Trust Bowler.**



TREMEC Elite

- Magnum T56, TKO, T5
- Close and Wide Ratio Gearing
- GM and Ford Applications
- Turnkey Kits Available

**Unbeatable Customer Support
Serving Hot Rodders Since 1963**

Custom Automatic Transmissions For GM, Ford & Mopar

- Calibrated to Each Specific Vehicle
 - Up to 1,000 lb-ft Capacity
 - 24 Month / Conditional Warranty after installation*
 - Vacuum-Tested Valve Circuits
 - Dyno Tested & Proven
 - Hand-Built by Specialized Technicians
- Each Unit Includes**
- Premium Clutches and Bands
 - New Steels, Sprags, Bearings
 - Blueprinted Valvebody & Pump
 - Sonnax Updates
 - Bowler Upgrades
 - OE Solenoids

*Warranty activation grace period up to 24 months from the date of purchase



Proud to be named the HRIA Business of the Year.

Bowler Performance Transmissions
10885 May Chapel Road
Lawrenceville, IL 62439
618.943.4856

bowlertransmissions.com

**HUGE SELECTION FOR
YOUR HOT ROD NEEDS!**

Disc Brake Kits - Spindles
Shock Kits - Steering Arms
Leaf Springs - Hairpins & Radius Rods
Spring Perches - Batwings
Complete Chassis Components
& MUCH MORE!



Magnum Suspension
5525 N Golden State Blvd #105
Fresno, CA • 93722
559-276-0700 • 559-276-0709 fax

SECURE ONLINE ORDERING 24/7
www.magnumsuspension.com

TECH UPGRADE



6 The Edelbrock Performer heads were installed over fresh Fel-Pro gaskets and torqued to the block with ARP head bolts. Because this is a factory block, always use Teflon paste on the bolts to seal the water jackets.



7 Pushrods were passed through the guideplates on the Edelbrock heads, with a dab of assembly lube on each end.



8 Comp Gold-series roller rockers, retained from the previous build, were installed on the studs. Each pair was rotated to the base circle of the cam and tightened with a half turn of preload.

**THE BEST INSTRUCTIONS.
PERIOD.**

US. THEM.

PAINLESS
PERFORMANCE PRODUCTS

GM Squarebody - 150+ Pages

'69 & 2nd Gen Camaro - 125+ Pages
& many more 100+ page full-color installation guides

Don't let inferior instructions make your wiring project a pain!

PAINLESS
PERFORMANCE PRODUCTS

Taking The Pain Out Of Wiring Since 1990
Tech Line: 800.423.9696 painlessperformance.com



9

At this point, we used an old set of valve covers and junk intake manifold to paint the engine the perfect shade of Chevy orange. A Comp billet timing cover was used to seal the engine front.



10



11

A bead of silicone was laid around the water jackets of the Edelbrock heads and china wall and the Edelbrock intake manifold was set in place.



12

The harmonic balancer was reinstalled on the crankshaft snout.



13

An MSD ready-to-run distributor was dropped in place and will handle ignition duties for the engine.



14

With the engine complete, we loaded it up and headed to Westech.



Auto Meter
Custom Shop

YOUR COMPLETE
CUSTOM DASH IS JUST A
FEW CLICKS AWAY.

THE WORLD'S FINEST HAND CRAFTED INSTRUMENTS

YOU DIDN'T BUILD AN OFF-THE-SHELF CAR, SO WHY WOULD YOU SETTLE FOR OFF THE SHELF GAUGES? THE AWARD-WINNING AUTOMETER CUSTOM SHOP ALLOWS YOU TO CUSTOM DESIGN YOUR OWN AUTOMETER GAUGES. CREATE A LOOK AS UNIQUE AS THE WORK OF ART YOU PUT THEM IN.



Auto
Meter
COMPETITION INSTRUMENTS

FOR MORE INFORMATION VISIT
AMPCUSTOMSHOP.COM



15



16

On the dyno, the FiTech system proved extremely easy to use. Steve Brulé punched the engine specs into the handheld controller and the engine barked to life.



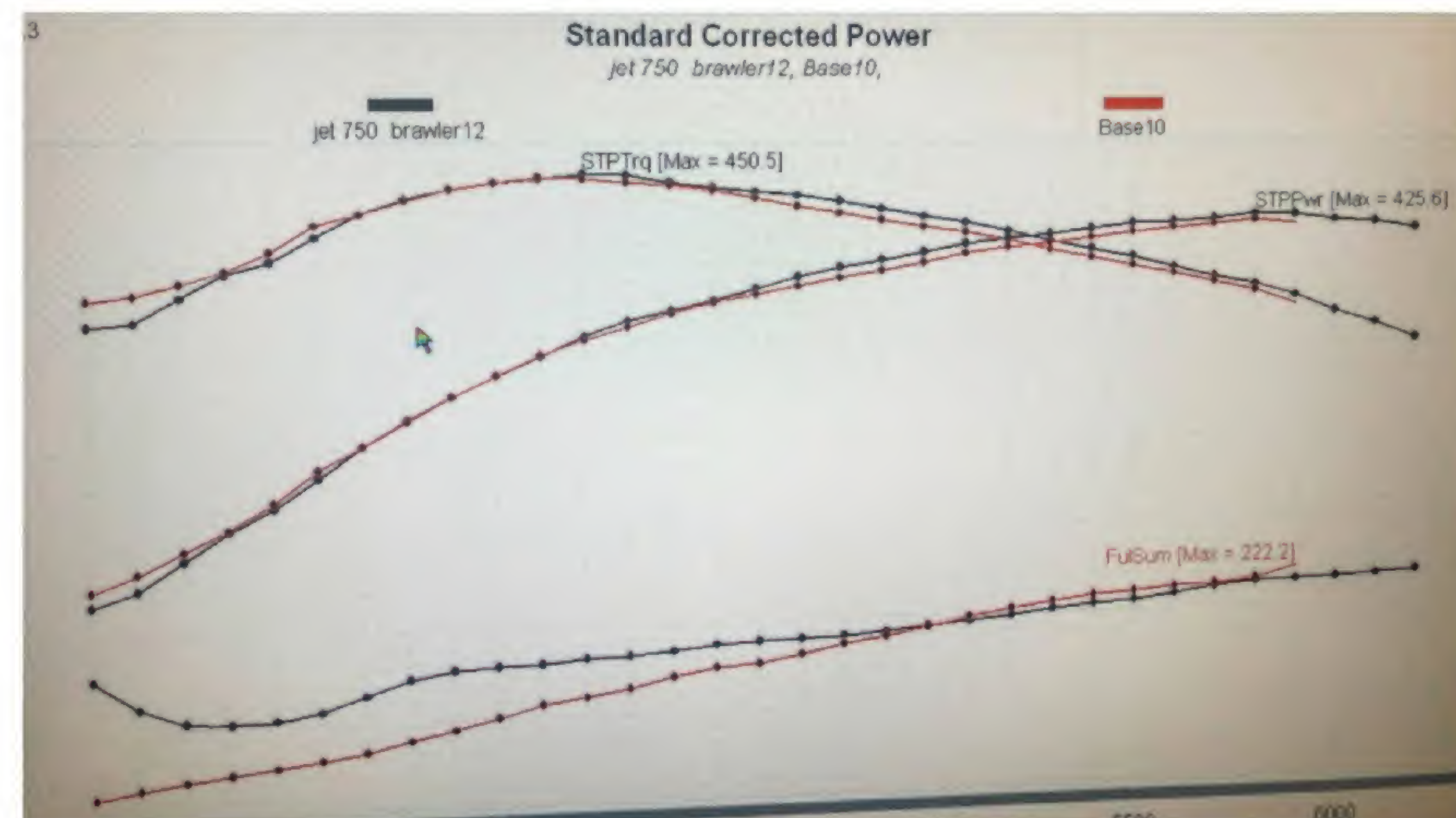
17

The engine was run through a break-in cycle to seat the piston rings, then it was time to see what it was good for.

The engine made great power out of the gate and the FiTech system self-learned its wants and needs. Troy Goldie made a few adjustments to the engine's timing, hunting for more power as the day progressed.



18



The final results were a more than healthy 450 lb-ft at 4,000 rpm with 400 lb-ft available as low as 3,200. Peak power was 425 hp at 5,800 rpm. The engine delivered as promised but we have a few tricks up our sleeves and with a few parts tweaks, we think the engine will crack the 500 lb-ft barrier.

GET \$60 BACK

WHEN YOU BUY 4 SELECT BF GOODRICH® SILVERTOWN® TIRES*

SPECIAL REBATE RUNS JULY 1 THRU AUGUST 31, 2019

*Via \$60 mail-in rebate check. Purchases must be made by 08/31/2019. Not available on previous purchases. Not applicable at wholesale or distributor prices. Continental US only. Does not apply to Radial T/A® or g-Force™ Comp-2™ tires. Some exclusions apply.



BF Goodrich
Tires

FREE MOUNT, NITROGEN
FILL & BALANCE WITH THE
PURCHASE OF A FULL SET
OF TIRES & WHEELS!

SPEAK TO AN EXPERT
866-391-4849

SHOP ALL OF OUR BRANDS
COKERTIRE.COM

Call Today
For Our Free
Catalog!

feature

HOME IS WHERE THE HOT ROD IS

HOW THE GRIOTS PUT A GANGSTER BACK IN THE GARAGE

The reasons why people want a particular vehicle outnumber the people who own them. But here's one you won't hear often: "My mom thought it would be cool." "OK, so I grew up liking Lincolns because of the stories my mom told me about living in Southern California," Nick Griot continues. "One of her best friend's parents had Continental hardtops. She talked about eating Twinkies in those cars as she and her friend were driven back and forth to school. I was into Camaros and she was like, 'Those are gross cars. Why don't you build a nice old car like a Lincoln?' She put that in my head."

Then fate gave Nick another reason to own a Kennedy Continental. Again, it's not a common one. "My wife and I bought this house," he explains. "When we closed we got this historical photo album. One of those photographs had a picture of the driveway." And in the carport at the end of that driveway sat two Kennedy Continentals, a white hardtop and a black convertible. "We closed on April 30, 2015," Nick says. "It was 10 days later I bought a '63 Lincoln."

BY CHRIS SHELTON PHOTOGRAPHY BY THE AUTHOR



HOME IS WHERE THE HOT ROD IS

"My goal was to do that car not only so my mom would like it but to bring a Continental back to that house. The timing was good, too; I had what I thought was a minor house renovation." Even the car's description matched the house's—cosmetically needing but admirably intact. "Every surface needed to be touched, but it was complete." The person from whom Nick bought it purchased it from the man who owned it from 1967 to 2014. Like the house, it came with its own photo album of sorts. "He had every record and photos of the car in every scenario you can imagine over the years. It was clear that he loved it."



"I brought it straight to the house where I was living, which was the carriage house above my dad's garage. (Before you pass judgment, know that Nick's dad is Richard Griot, founder of Griot's Garage, the car care company.) "I brought it into our personal garage and six Griot's Garage employees came over and we pulled the engine. That was the thing I knew needed to go after I did all the research; the 430 is unique, and there aren't many tuning paths to go."

"I experimented to see if I could save the paint and bring the stainless trim back on a buffing wheel," he says. "All of those litmus tests failed." In fact, the car was taking a direction much like the one his house had, "... which was a whole huge mess!" he says, laughing. "We'll just clean everything and put a new engine in it" became "OK, everything needs to be done."

He found a sympathetic ear in Jared Hancock at J-Rod & Custom in Auburn, Washington. His crew built



a killer phantom two-door three-series BMW wagon for the Griots and is in the process of going through a Lamborghini Espada for the family.

"It spiraled into this crazy Pro Touring concept," Nick says. "We could never get that idea out of our heads, so we just ran with it."

To get the stance right, the J-Rod crew modified the front suspension for clearance. They replaced the rear leaf springs with a four-link made from Art Morrison Enterprises components. Both ends ride on

RideTech coilovers. "Everyone is shocked that it's static," Nick says.

They modified the wheeltubs, but not how you'd expect. "There's a lot of space between the quarter-panel skin and the wheelwell," Nick points out. "So we made a new outer wheelwell that followed the contour of the quarter-panel very tight," Hancock adds. "(It) gave the car an aggressive, purpose-built look with the rear wheels sitting where they should."

Those wheels are 20x9 and



Hollywood

HOT RODS

Long Beach Legend
1936 Ford Roadster

RESPECT TRADITION

VISIT US ON OUR SITE FOR BUILD UPDATES & MERCHANDISE

818.842.6900
HOLLYWOODHOTRODS.COM

HOME IS WHERE THE HOT ROD IS

20x11 Forgeline CF3Cs. They wear 255/40ZR20 and 305/35ZR20 Pirelli P Zeros. They narrowed the 9-inch axle 2 inches to make the rear wheels deeper. A set of Baer 13-inch rotors and six- and four-piston calipers promise to scrub off speed.

Though 427 ci, the Ford Motorsports 535hp Boss crate is based on the legendary Windsor architecture. Oddly enough it makes sense for this series Lincoln. "The car is incredibly large, but it's a unibody and the engine bay is deceptively small," Nick says.

Nick laments that in stock form everything crowds the engine. "Everything was stamped here, and there was a strut tower there," he says. So Chad Terhar and Ross Petersen reshaped a simpler engine compartment. The air filter housing that Ross formed conceals the ignition wires on their way back to the firewall, where they circle around and project forward to the plugs.

"There was a ton of effort in trying to simplify the engine and make it look like a centerpiece of the car," Hancock explains. Evod Industries machined the rocker covers in the likeness of the ones that came on the 430.

Hancock fabricated the headers from 1-7/8-inch stainless. He built the exhaust system from 3-inch pipes, a J-Rod JCX X-pipe, and a set of Flowmaster mufflers. Those pipes pass an AOD built by Tacoma's Kerry Holmgren. It spins a 4.11:1 gear on

a Strange Engineering limited-slip carrier with 31-spline axles.

Externally, the car remains largely stock right down to the handles and badges. Hancock opened up the

Puyallup worked up a contemporary leather twist on the stately interior. A set of Dakota Digital VHX-series gauges replaces the mechanical movements.

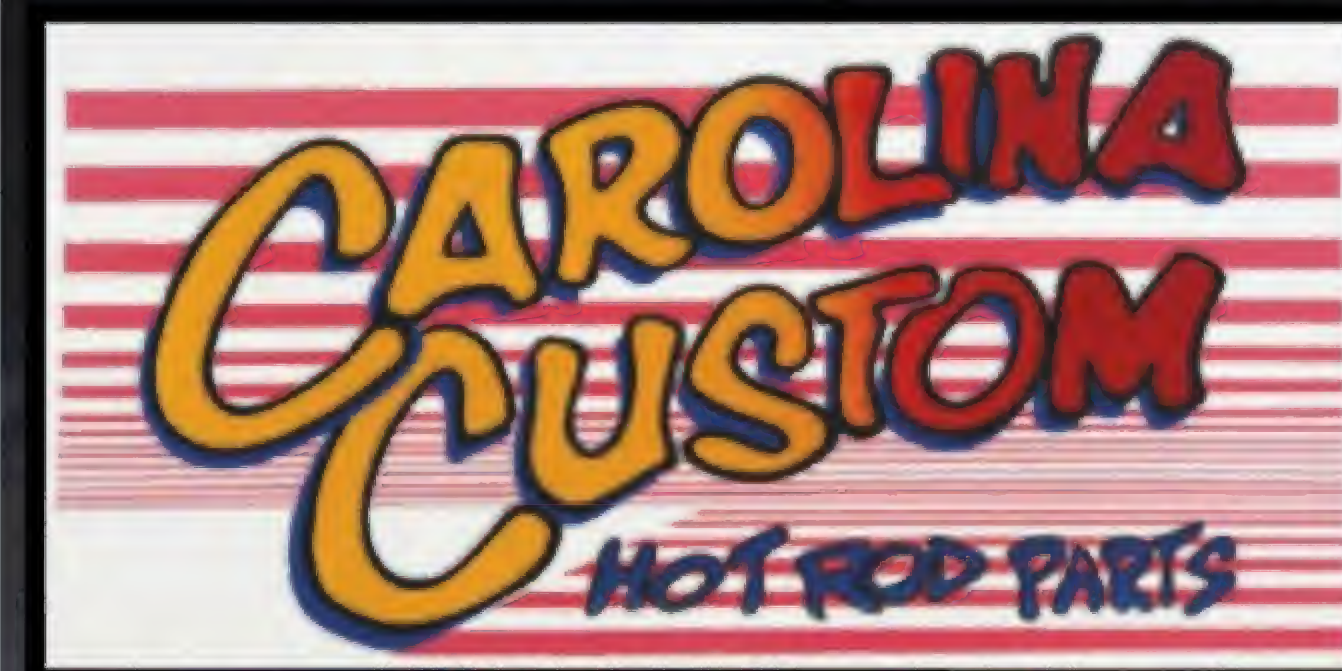


bumper to extend the radiator's intake area. The chin spoiler does more than look cool; it directs more cooling air to the radiator, transmission, and power steering coolers. Josh Jones and Ray Porthan prepped and painted it the ideal color for the son of the proprietor of a car care company: PPG 9700 black. Jason Kilmer cut and polished it to its ultimate shine and Ogden Plating chromed everything, stainless included.

Jamie McFarland at McFarland Custom Upholstery in nearby

Nick loves the car. But more importantly, how does his mom, Sara, feel about it? "She thinks it's too loud, which is perfect," he says, chuckling.

A '60s Lincoln isn't as exotic as the sports and racing cars in the Griot's Garage stable. But when he talks about it, Nick's face lights up in a way that it doesn't about those other cars. It's obvious that he has a deeper connection to it. Which I'm sure Sara Griot would interpret as mother, not father, actually knows best. 📺



910-564-6123



OR VISIT

WWW.CAROLINACUSTOM.COM

Outside Handle Install / Bellcrank Kit



Allows for easier hookup of outside handles when window channels and glass interfere with the handle shaft. Consists of a handle adapter that transfers movement from the handle to the bellcrank at the bottom of the door and from bellcrank up the other side of glass to the latch. Includes 18" linkage rods.

\$124.95 set

License Retractor



This retractor is only 1-1/2" tall in the retracted position. All satin aluminum. Will lower license plate when ignition is turned on and raise plate when ignition is turned off.

\$549.95

Aluminum / Steel Trunk Hinges



Available in paintable steel or satin finished machined aluminum with or without mounting hardware.

- Steel Hinges - \$79.95
- Steel Hinges w/mounting bracket - \$109.95
- Alum. Hinges - \$129.95
- Alum. Hinges w/mounting bracket - \$159.95

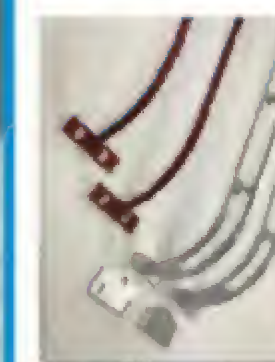
Retro Power Window Switches



Allows use of your window handle to operate your power windows. Kits to fit pre 48' Ford, pre 48' and 49' up GM spline.

\$139.95 pair

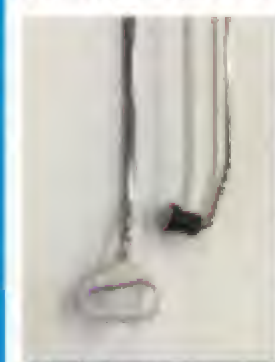
Hood Brace Kits



Braces stiffen your hood, make it fit better and makes your latch operate smoother. Available in steel or machined aluminum. Available for 30-35 Ford and 34-35 Chevy.

- Steel Braces - \$89.95 pr.
- Alum. Braces - \$159.95 pr.

Stainless/Aluminum "Stick Rod" Door Props



These are great for holding doors open at car shows - works with rotary "Bearjaw" latches

\$64.95 pair

Doorjamb Wire Eliminator Kit



Provides an easier way to get power into the door, especially on cars with hidden hinges. Stainless pins with flat contacts allow easier alignment. Available with up to 9 contacts with or without built in dome light switch. "NO Brass"

Starting at \$49.95 per door

47-53 Chevy Truck Grille Lights



These LED lights bolt into the same holes as the original lights but recess the light back into the grill out of sight. Amber park and turn signal.

NEW

\$114.95 pair

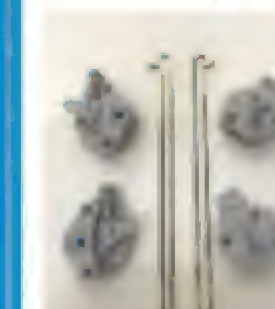
47-72 Chevy Truck Taillight Mount 53-56 Ford Truck Taillight Mount



Tubular taillight mounts for 47-72 Chevy using 47-53 or 54-59 lights and 53-56 Ford using large Ford light or earlier round light. Chevy available with or without license bracket.

Starting at \$144.95 pair

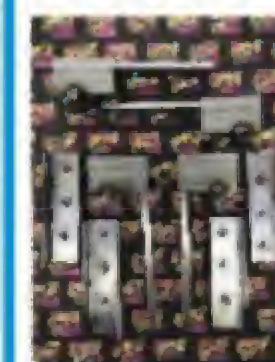
EZ Door Handle Install Kit



Allows for easy hook-up of handles to rotary latches. Inside kits available for pre 48' Ford and Mopar square shank, pre 48' GM and 49' up GM spline. Outside kits are for square shank handles and only work when window channels are not in the way of the handle shank.

Inside Kit - \$74.95 pr. • Outside Kit - \$74.95 pr.

Hidden Hinge Kits



3/8 Thick hinge straps with 3 screws per hinge for strength. Hardened and ground hinge pins. Adjustable door stop and bolt up pockets for doors. Self lubricating bushings in both pockets and hinge strap. Hidden switches for dome light / alarms. 90° opening on most doors.

Hinge Kit for 2 Doors \$369.95

Latch Install kit



Includes latch mounting plates with dimpled screw holes and floating nut striker plates and stainless latch screws. Available for large, medium and small latches.

Kit for 2 Doors \$65.00

(Bearjaw) Rotary Double Catch Latches



Latches are available in large, medium and small and include strikers. All are door rated. Mini latches are not door rated.

- All Sizes - \$45.00 pr.
- Mini Latches - \$34.00 pr.
- Trunk Latch - \$25.00 ea.

Stainless Strikes - 11/16", 9/16", 1/2" - \$46.00 pr.

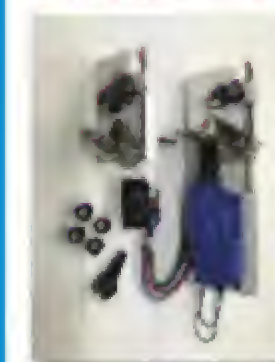
Electric Trunk Lift



Mounts over fender well. All parts are hidden except the satin aluminum arms. Reversible for either side of trunk. Available in either 100# or 200# actuators and with choice of arms. Round hole, Ball Mill or Windows.

- 100# Kit for Average Trunk \$379.95
- 200# Kit for Heavy Trunk \$414.95

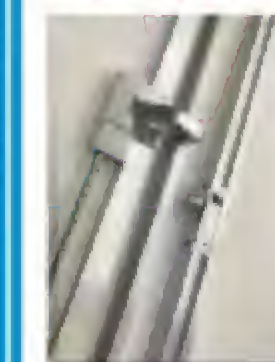
Suicide Door Safety Pins / Door Locks



Safety pins are a necessity with suicide doors. They install easily with two screws. They feature stainless steel slide pins and knob shafts. Kits include snap in plastic bushings for door jamb, stainless screws, black plastic knobs and instructions.

- Manual Kit \$79.95 (satin alum. knobs) \$30.00
- Electric Kit \$129.95 (polished alum. knobs) - \$40.00

3 Piece Hood Hinge and Latch Kits



Our triple open hood hinge and latch kit allows the hood to open from the left, right, or to be lifted completely off. Top only latch kits allow just the hood top to be used with no sides and the latch to be hidden. They feature easy to reach release knobs. Hood snaps in place. Hinge kits come with stainless steel prop rods and no additional cost.

Alum. triple open kit \$409.95 • Steel single open kit \$339.95 • Alum. Top only kit \$319.95



feature

SCRAPE'D

BARRY WEISS' '39 ZEPHYR TREASURE

When this feature landed on my desk, it wasn't the vehicle in particular that first caught my attention, rather, its particular owner, Mr. Barry Weiss, someone I've known long before any cable TV networks ever existed. While most may recognize his name from his commanding role on A&E's *Storage Wars*, many know him personally through his off-camera wheeling and dealing with, and sincere love of, vintage cars and motorcycles. To me, however, he's a family member, even if not by blood relation.

BY ROB FORTIER PHOTOGRAPHY BY PETER LINNEY



Barry's always been a hustler and a collector—I first met him back in the '80s through his godson, Jesse James (Barry and Jesse's father were at one time partners in the antiques game). But it wasn't until the following decade that I really got to know Barry as the avid, often spontaneous, and overly eccentric collector he was. One late night after an evening out in L.A. doing who knows what, he threw out one of his "fruit basket" offers (his family was in the wholesale produce business and supplied all the greater Los Angeles grocery stores with their fruit and veggies) to get us to come hang out at his warehouse in Hollywood; I was more intrigued by the dozen or so

: SCRAPED

'20s-'30s streamline travel trailers he'd amassed and squeezed inside the old building than I was apples and oranges! Having only been exposed to Airstreams of this era up until this point, seeing his gleaming Silver Streaks, Spartans, and the like all caravaned together was something else—but hearing him go on and on about each one in salesman-like detail proved Barry was as enthusiastic as he was eccentric. When the trailers became too much to deal with, Barry's peculiar nature led him to begin acquiring customs—but not your ordinary-type custom cars.

The first of Barry's rather distinguished customs that I can recall was the "King of Mercs" built and owned by Frank DeRosa. Like the Zephyr pictured here, it too was purple in exterior color when initially acquired—but after losing a little right-of-way disagreement with a semi truck, the '51 Mercury went from two-toned and scalloped purple to tribal-flamed satin black, for which it's probably best known under Barry's custodial care. Barry would eventually sell the King,



855.313.9173 | SpeedwayMotors.com/Gearheads



: SCRAPE'D

but only as a means to acquire another DeRosa job, the "Cowboy Cadillac"—an in-progress '47 Series 61 fastback, which he still owns to this day. The '39 Zephyr, however, was bought more as an investment—a flip, as it were.

This here is the original "Scrape"—not one of the fiberglass jobs its original owner/designer Terry Cook popped off under the Deco Rides name. Completed over 20 years ago by Ramsey Mosher in Dover, Delaware, the beyond heavily modified coupe was toured around the country for a couple years by Cook before eventually being sold at auction for a pretty penny—by a man with plenty a pretty penny, Robert E. Petersen, who purchased the Zephyr for his namesake museum. On display for nearly a decade and a half, in 2013 Scrape once again hit the auction blocks—but this time, the well-worn custom only fetched a fraction of its previous selling price ... and Barry, of course, the highest bidder.

Upon initially acquiring the hammered Zephyr (figuratively and literally), Barry toned down the exterior a tad in his usual satin black fashion, and just as he does with all things motorized in his possession, proceeded to hammer the coupe around town and beyond until he felt it was time to capitalize on his investment. Before doing so, however, the car was repainted in Cook's originally intended color—black—and freshened up wherever deemed necessary (it retains the

hydraulic suspension and even the same interior originally installed back in the '90s). In 2017, Barry put Scrape up for auction for its third time, but unfortunately was unable to rally bidders high enough to meet reserve, so back to the Weiss stables she went and remains to this day.

(As of this writing, Barry was in a very serious motorcycle accident. On behalf of myself and the entire STREET RODDER staff, we wish him a full and speedy recovery!) 📧



Modern Wipers For Classic Cars

Complete Clean Wipe Systems Available For:

1926-27 Ford Coupe & Sedan
1928-29 Ford Cars & Trucks
1930-31 Ford Cars & Trucks
1932 Ford 3-Window Coupe
1932-34 Ford Trucks
1935-36 Ford Cars & Trucks
1937 Ford Cars
1938 Ford Cars
1940-47 Ford Trucks
1937-46 Chevy Trucks
1935-38 Plymouth
1965-71 Scout 800
1966-77 Bronco

Model Specific Bolt-In Motor Upgrade Kits For:

1946-53 Anglia
1936-59 Buick
1937-58 Cadillac
1935-69 Chevy Cars
1958-67 Corvette
1964-72 Chevelle
1967-78 Camaro
1962-79 Nova
1947-72 Chevy/GMC Trucks
1940-51 Desoto
1940-50 Dodge Cars
1948-53 Dodge Trucks
1958-60 Edsel
1937-61 Ford Cars
1964-1/2-68 Mustang
1960-65 Falcon/Fairlane
1955-60 Thunderbird
1948-66 Ford Trucks
1937-54 Hudson
1950-57 International Trucks
1951-54 Kaiser Henry J
1940-60 Lincoln
1939-61 Mercury
1939-48 Nash
1960-62 Comet
1935-58 Oldsmobile
1938-56 Packard
1940-50 Plymouth
1935-58 Pontiac
1967-78 Firebird
1937-64 Studebaker Cars
1949-63 Studebaker Trucks
1946-64 Willys Trucks
1957-63 Willys FC 150 Trucks



**If It Doesn't
Say New Port
It's Not The
Real Deal!**

We have remained the most respected name in windshield wiper upgrade kits because wipers are our first and only business! Whether you drive your classic vehicle every day or only to events, having a modern multi-speed or variable-speed electric drive wiper system is not only a great convenience but a real safety improvement as well.

- ✓ Steel Linkage And Chassis Powder Coated On Complete CleanWipe Systems
- ✓ Heavy Duty Transmission With Oilite Bronze Bushings
- ✓ Quiet Powerful Two-Speed Self-Parking Electric Motor
- ✓ Polished Stainless Arms and Blades Standard On Complete Systems
- ✓ Optional Washer Pump Kit ✓ Optional Intermittent Delay Switch

800-829-1929

www.newportwipers.com



**JW
ROD GARAGE**

ROLLING CHASSIS AVAILABLE

'41-'54 CHEVY TRUCKS

'48-'56 FORD TRUCKS

'28-'40 FORD CARS AND TRUCKS

'55-'57 CHEVY CARS

'36-'47 MOPAR TRUCKS

'33-'34 MOPARS

'53-'61 STUDEBAKER

'32 FORD FRAME RAILS

DIE
STAMPED
WITH A "C" NOTCH
BY JW ROD GARAGE

COMPLETE MUSTANG 2
HUB TO HUB KITS

HUNDREDS OF APPLICATIONS

948 W. SILVER BEACH RD
BELGIUM, WI 53004

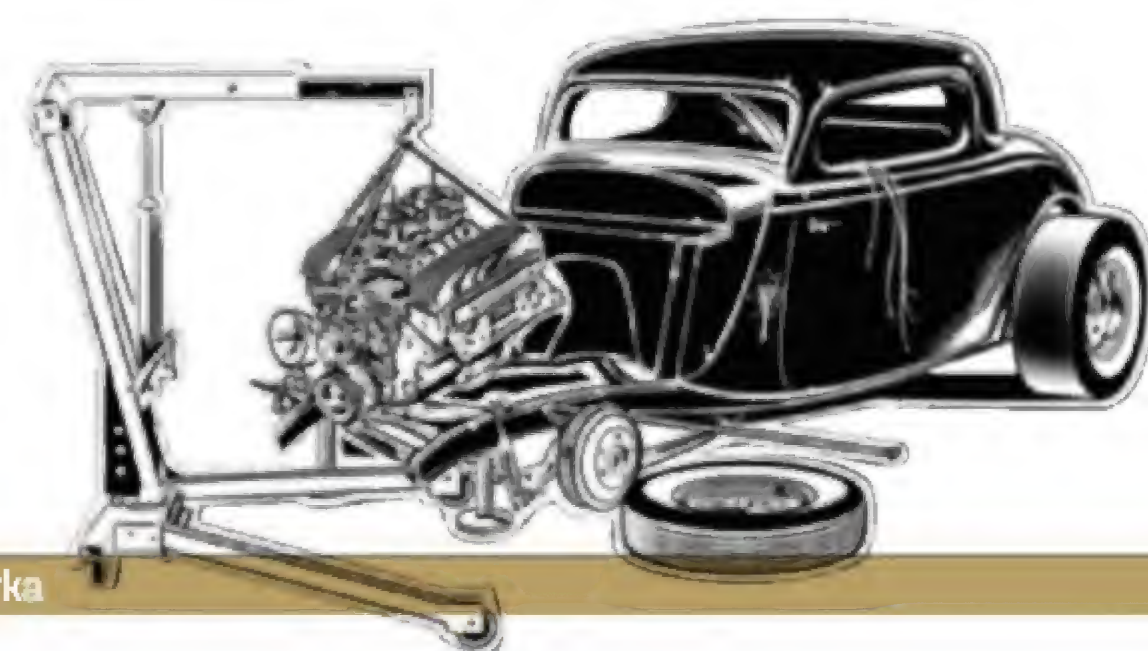
CALL FOR A FREE CATALOG

888-414-8787

WWW.JWRODGARAGE.COM

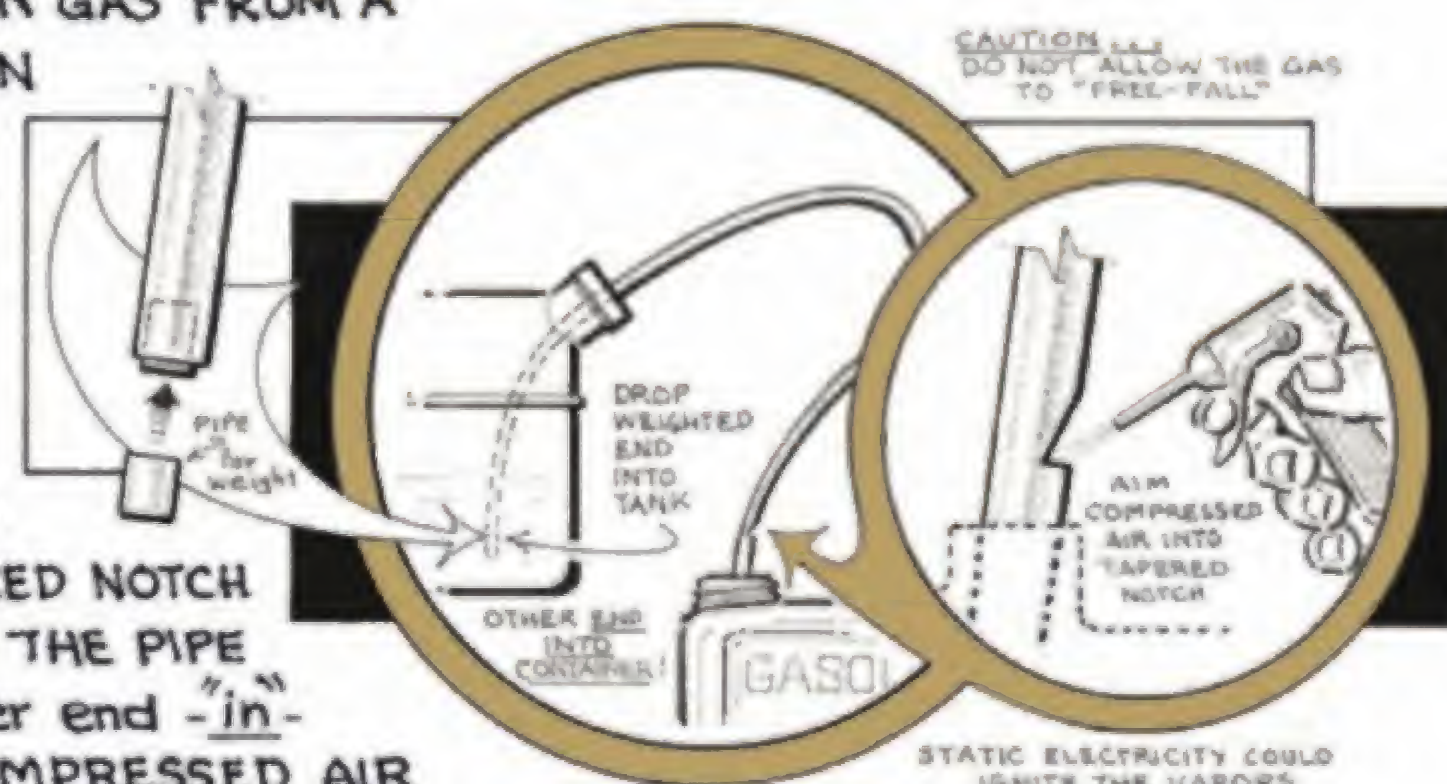
FIX'EMS

Bob Hovorka



A "Drop-In" SIPHON

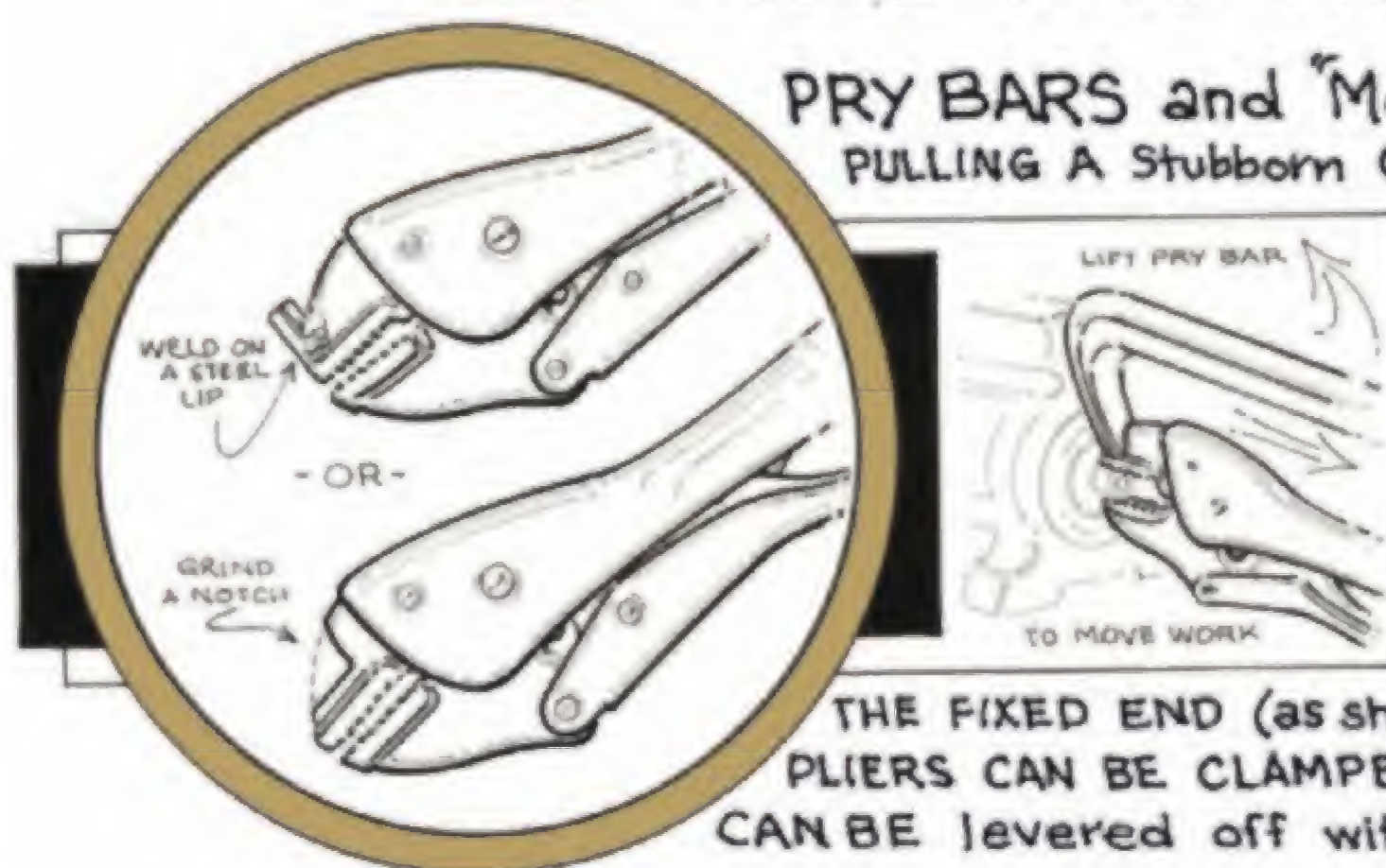
WHETHER YOU'RE TRYING TO SIPHON GAS FROM A LAWN MOWER, SNOW BLOWER or AN OLD CAR, THIS "Drop In" SIPHON MIGHT WORK FOR YOU. (CAUTION--do not use in cars with a flapper in the filler neck--it could catch and cause damage.) TAKE A CONVENIENT LENGTH OF HOSE. Securely fasten A PIECE OF PIPE IN ONE END (for weight.) CUT A TAPERED NOTCH IN THE OTHER END (as shown.) DROP THE PIPE END INTO THE TANK, hold the other end -in- the container. AIM A SHOT OF COMPRESSED AIR THROUGH THE TAPER TO START THE FLOW.



FOR THOSE WHO DRIVE 'em...

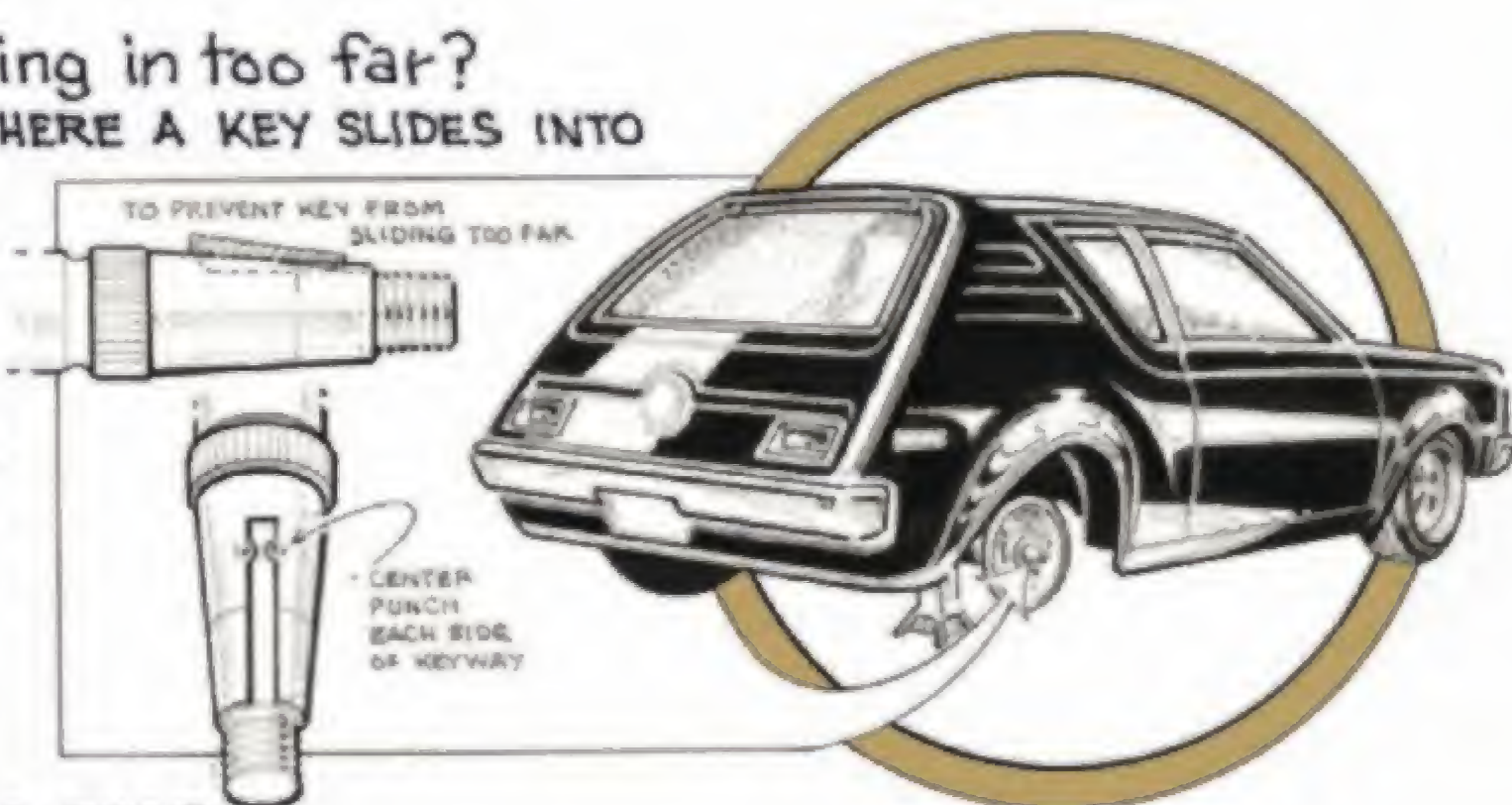
PRY BARS and "Modified" LOCKING PLIERS

PULLING A Stubborn COLLAR, AXLE SHAFT KEY or BEARING where there's no space to fit a puller? THESE "Modified" LOCKING PLIERS and A PRY BAR MIGHT HELP. EITHER WELD A FLAT PIECE OF THICK STEEL TO THE FIXED END OF THE PLIERS--OR-- (for lighter duty use) GRIND A NOTCH IN THE FIXED END (as shown.) NOW, THE "Modified" PLIERS CAN BE CLAMPED ONTO THE WORK and IT CAN BE levered off with the pry bar.



AXLE SHAFT KEYS sliding in too far?

THIS CAN BE A PROBLEM ANYWHERE A KEY SLIDES INTO A KEYWAY, but HAPPENS MOSTLY WITH WORN AXLE SHAFTS. As you align the keyway in the hub with the axle shaft key--and slide the hub on the axle shaft--the key tends to slide with it.) TO PREVENT THIS, TAKE A CENTER PUNCH and DIMPLE EACH SIDE OF THE KEYWAY--WHERE YOU WANT THE KEY TO STOP.



ADDENDUM--Regarding previous CONTAMINANT FREE SIPHON --
Some pumps may require the siphon's "outlet" to be left open



GET READY FOR LESS RUMBLE!

BY POPULAR DEMAND!

HOT RODS

COOL RIDES

Discover the Dynamat Difference!



Roadsters

Coupes

Trucks

Customs

DON'T MISS OUT!



Listen to *Los Noyse*, automotive legend:

ACTION PACKED ADVENTURE is fun to watch, but it isn't how you want to travel. When you hit the road, a cool, quiet, solid, trouble free ride is what you want. That's exactly what's in store when you and your car get the DYNAMAT treatment. Dynamat is an amazing space age material that knocks out the noise. Go to the show, enjoy your car, and leave the noise behind!

© 2012 Dynamat Corporation, N.A. Inc. All Rights Reserved.

STREET SHAKER



Chuck Vranas

Twisted Mistress

Randy Weaver's '31 Ford Coupe Blends Twin-Turbo Power with a Chopped and Channeled Stance

♦**Hot rodding** is all about walking the line in pursuit of that perfect combination of performance, style, and creativity. When you build some of the most thought-infused hot rods and customs for a living you had better bring your best game to the table when laying out plans to design one for yourself. For Randy Weaver of Sandy, Utah, sculpting



steel into truly memorable rides for clients gives him plenty of opportunity to blend together an endless stream of ideas. Along with his equally talented wife, Sydney, they own and operate Weaver Customs in nearby West Jordan. Their build style embodies an edgy element that always pushes the envelope, showcasing their own special fusion of fabrication, engineering, and design.

In Randy's own words, "I've always wanted to take a Ford Model

A and keep it classy yet sophisticated while injecting a wild modern twist to it." In creating his latest project, aptly named "Twisted Mistress," Randy merged a twin-turbo Ford small-block V-8 with just enough old-school vibe to make a memorable statement. Whenever you choose to blend traditional and modern elements together you're walking a very fine line in order to make the transitions seamless as you combine the eras.

Having built the car

in his mind for years it wasn't long till Randy and team member Carlos Delgado got started. To create a rock-solid spine they fabricated a custom frame from 2x3-inch box tubing complete with custom crossmembers, Z'd 10 inches in front and 12 inches out back. A Ford 9-inch rear was packed with 3.70:1 gears spinning 31-spline axles and suspended in place by a custom four-link with Panhard bar and QA1 adjustable coilover shocks. For sharp handling, a

Heidts Superide IFS was added, including their exclusive 2-inch dropped spindles, polished stainless control arms, and QA1 adjustable coilover shocks, along with rack-and-pinion steering. When it comes time to drop anchor, a Corvette-style dual master pushes fluid through stainless lines to 11-inch GM discs and calipers mounted at each corner. Linking it all to the street you'll find a set of 18x8 front and 20x10 rear custom-painted Ambassador (Artillery-style) wheels from Detroit Steel Wheel Co. wearing Toyo Proxes rubber.

When it came time to designing an engine Randy wanted to not only put a Ford in a Ford, it also had to make a statement. He contacted Bennett Racing Engines of Haleyville, Alabama, to build a fire-breathing small-block V-8 starting with a 351W SVO block. BRE then bumped it to 401 ci and massaged it to perfection, filling it with an Eagle forged steel crank and matching H-beam rods topped with SRP forged aluminum 9:1 pistons. A Comp Cams hydraulic roller stick sets the beat while a set of ProComp

aluminum cylinder heads generate seamless power. Up top there's plenty of magic with a Quick Fuel Technology Q-Series 750-cfm Blow-Thru Carb perched on an Edelbrock intake linked to a pair of 60mm turbos generating loads of seat-pinning power. Randy then added custom turbo plumbing to tie it all together. An MSD ignition lights the fire with spent gases blowing through stainless headers to a matching 3-inch exhaust. A B&M Street Strip Ford C6 transmission packed with all the right bits moves the goods to a custom driveshaft. It's all good for 650 hp on the dyno at 6,000 rpm.

There's nothing like starting with a nice, solid, original body. Commencing at the top, the lid was lowered 6 inches while also filling the opening and fabricating a custom visor. The cowl was then filled and smoothed, accented by custom inner rear wheelwells and an extended tail pan. An extreme amount of detail went into flush-fitting the doors as well as fabricating new floors. The body was then channeled 4 inches to complete the look. The team then set the gaps and made everything mirror-straight to prepare it for paint. To add an air of elegance and sophistication Randy loaded his spray gun with just enough Axalta Sandy Bronze pearl and laid down a mile-deep coating, bringing it all to life. Cool details like a Deuce grille, '39 Ford taillights, and custom leather trunk straps add



just the right amount of class.

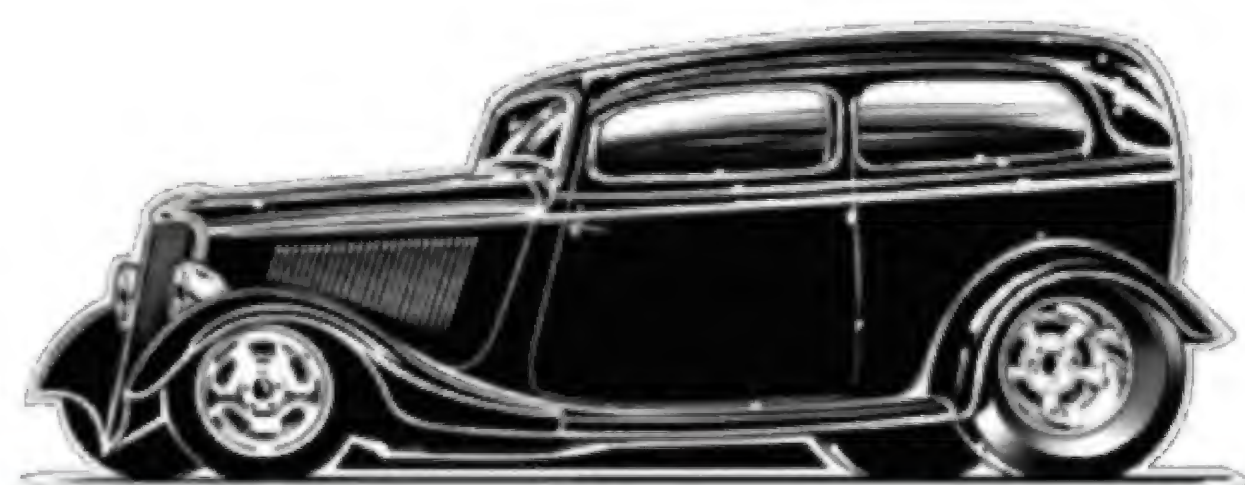
Inside it's all business, starting with the factory dash filled with dials from AutoMeter to monitor the vitals. A Grant steering wheel mounted to an ididit tilt column carves the course while a custom console houses a B&M shifter to pull gears. A pair of one-off seats were covered in Hydes Beluga Black leather in a classic pleated pattern

by JS Custom Interiors of Salt Lake City who also whipped up the custom side and kick panels as well as the headliner, all accented by Mercedes black velour-

style carpeting. The completed coupe perfectly blends vintage charm with a well-balanced modern twist, making it a standout in any crowd, and we dig it.

EARLY IRON

Tim Bernsau Photos provided by Wayne & Nancy Osterhaus



Old-School Truck

◆ When Wayne and Nancy Osterhaus of Seneca, Kansas, were looking for a classic truck they contacted Gary Rinehart of Eagleville, Missouri. Rinehart had previously built their '34 Ford coupe, and had a couple of '41 pickups in his shed. Wayne and Nancy chose the one with a 2-1/2-inch chop. "We wanted a simple, subtle, old-school truck," Wayne told us. "Our only request was that it have that perfect Boyd Coddington stance—and air conditioning."



up with '46 Ford caps and rings. The 165/80R15 and 235/75R16 tires provide a "rubber rake" stance.

"I work for a Dr Pepper distributor, so that's how the Dr Pepper theme came about," Wayne says. "I do sign lettering for a hobby and hand-painted the '40s-style Dr Pepper

logo on the doors and air cleaner cover."

Bill Cantrell at Liberty Auto Upholstery covered the cut-down minivan seat in pleated synthetic leather. Other interior details include the Lokar shifter, Vintage Air A/C, and a 15-inch '40s-style steering wheel.

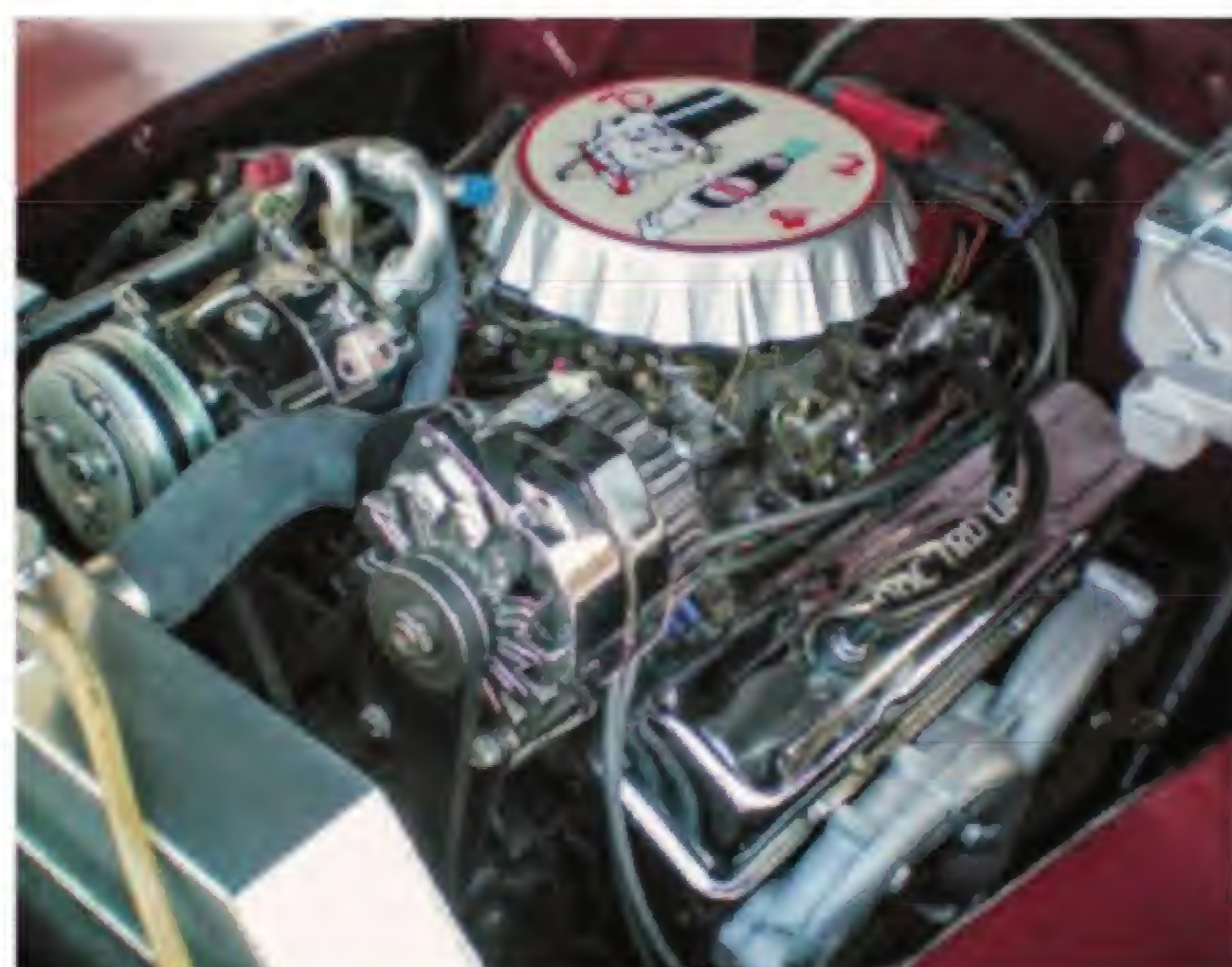
"The build took about three years," Wayne told us. "Driving the truck from Eagleville home to Seneca was 150 miles of smiles."

Read more about Wayne & Nancy's '41 Ford at streetrod.com.

The stance is achieved by a Fatman IFS and Posies adjustable rear leaf springs from Pete and Jakes, installed on the boxed original frame. The 350 small-block features a mild cam, Edelbrock carburetor, and custom graphics on the air cleaner and valve covers. A new driveshaft carries torque to the 3.00-geared rearend. "Its sweet spot is about 90 mph on the Interstate, and Flowmaster mufflers give it a nice throaty sound," Wayne reports.

Rinehart and Wayne agreed on Midnight Canyon Red paint, an '86 Ford color. Abrasive

rubbing materials created the perfect pulled-out-of-a-barn finish. The 15- and 16-inch steelies were painted '88 Ford Sand Beige and dressed



Fuel slosh inside a tank can cause a fuel gauge to give erratic readings. This is because a standard fuel sender with a pivoting float will bob up and down on the fuel, sloshing around in the tank. Classic Instruments has a tube-style fuel sender available that will eliminate the effects to the gauge of fuel sloshing around in the tank. The tube-style fuel senders don't have a pivot setup on the float so it doesn't move as much when fuel sloshes in the tank.



Shop the **NEW**
UPcarparts.com
For Our Brilliant LED Sequential Tail Lights!

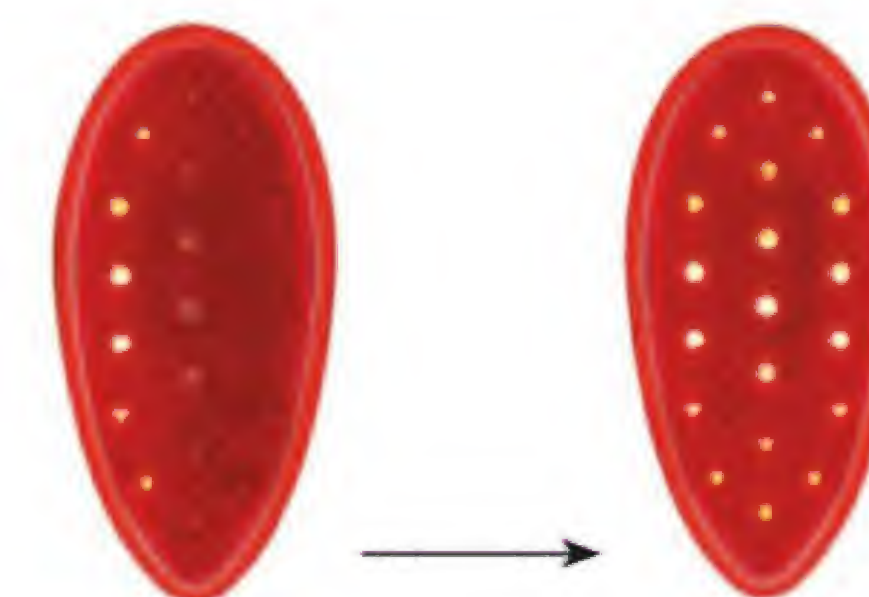
- Super bright LED lights with fully sealed epoxy coated electronics and polycarbonate lenses.
- Available in standard and sequential operation with selector switch to control sequential function left, right or off.
- Comes with sequential-once brake attention function.
- Easy plug and play installation.

40 LED Sequential Tail Light
for 1960-66 Chevy Truck
Product Number: 110199

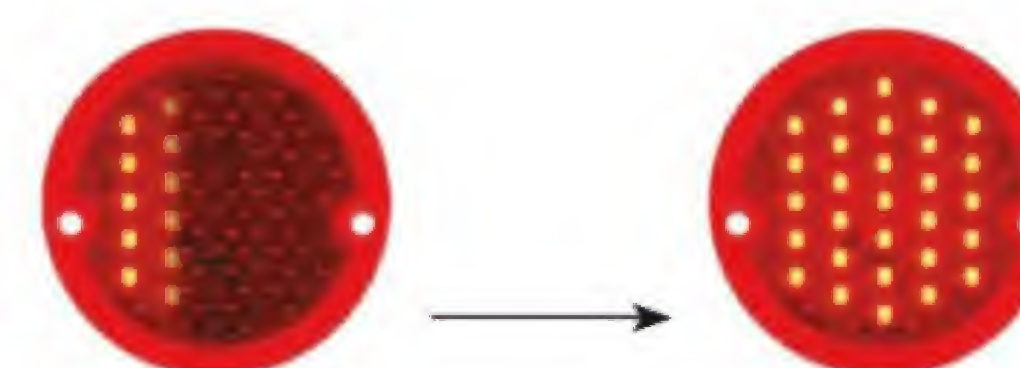
SEQUENTIAL
F-L-A-S-H
BRAKE
ATTENTION



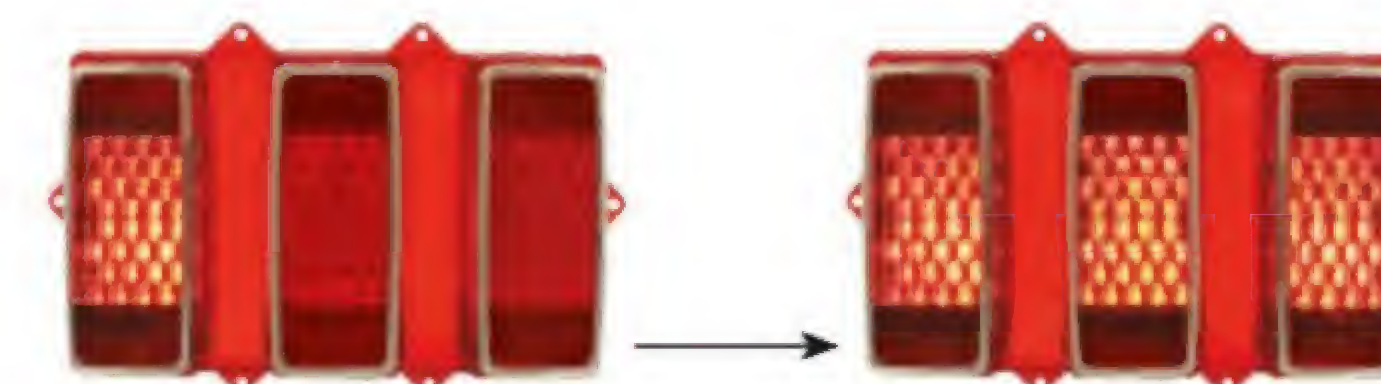
38 LED Sequential Tail Lights
for 1953-56 Ford Truck
Product Number: 110144 (LH) / 110145 (RH)



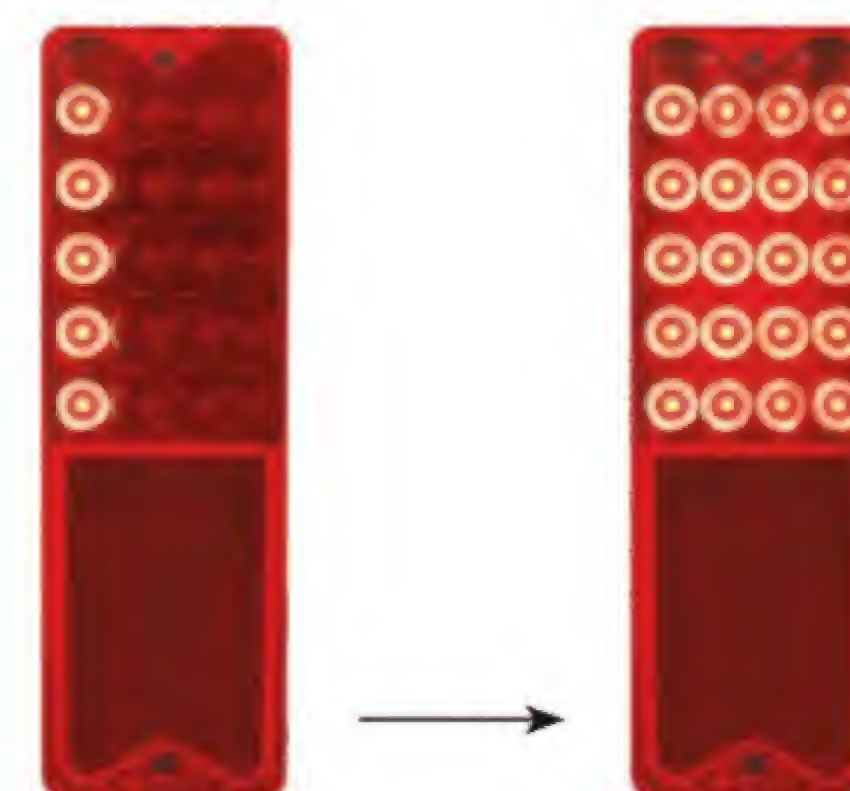
19 LED Sequential Tail Light for
1938-39 Ford Passenger Car
Product Number: 110253



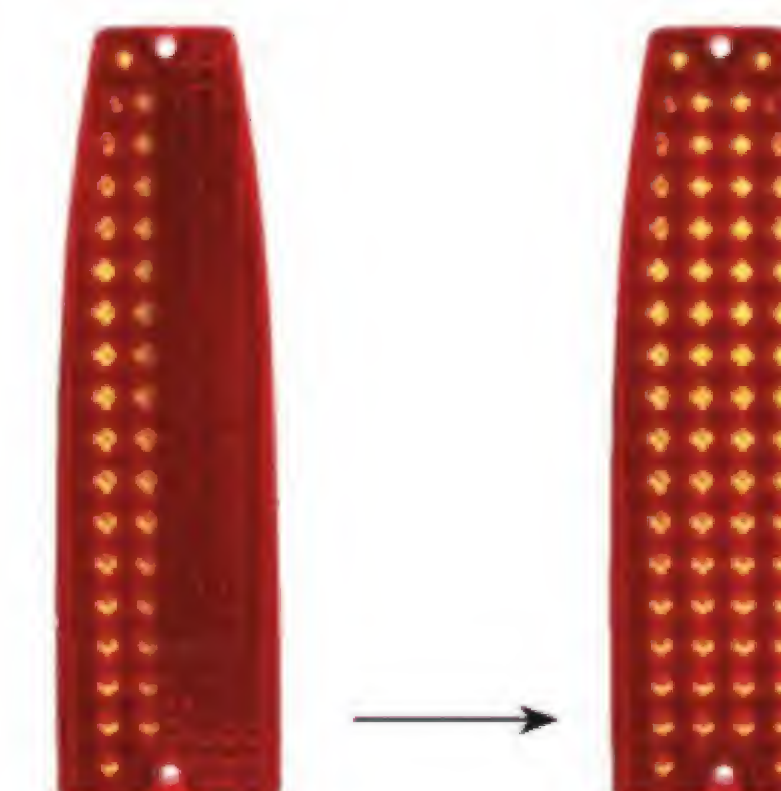
29 LED Sequential Tail Light for 1954-59
Chevy Truck
Product Number: 110405



108 LED Sequential Tail Light
for 1969 Ford Mustang
Product Number: 110107



20 LED Sequential Tail Light
for 1967-72 Chevy Truck
Product Number: 110214



1 Piece Style LED Sequential Tail Light
for 1966-67 Chevy II & Nova
Product Number: 110360

SHOP MANUAL



Ron Ceridono

When Bigger Isn't Better and Simple is Best of All

Q I'm installing a new engine in my '40 Chevy sedan. It's an HT383 Chevrolet Performance long-block rated at 323 hp and 444 lb-ft of torque. The car has a 700-R4 overdrive automatic and this engine was recommended to me by a friend who has a lot more street rod building experience than I do. He said not to worry about dyno horsepower numbers and that this engine will perform well because of the torque it produces. We take lots of road trips during the summer and the 307 it's replacing

was strained at times.

I've debated what to do for the fuel delivery system. I've gone back and forth between fuel injection and a carburetor. For a number of reasons, including the costs, I've elected to go with a carburetor; now I have to figure out which one.

My first concern is how big of a carburetor to use. I've seen both 650- and

750-cfm carburetors recommended in print and on the web in various dyno tests of this engine. The second question is about air bleeds. I've been told that carburetors with adjustable air bleeds make them easier to tune. Should that be a consideration when selecting a carburetor?

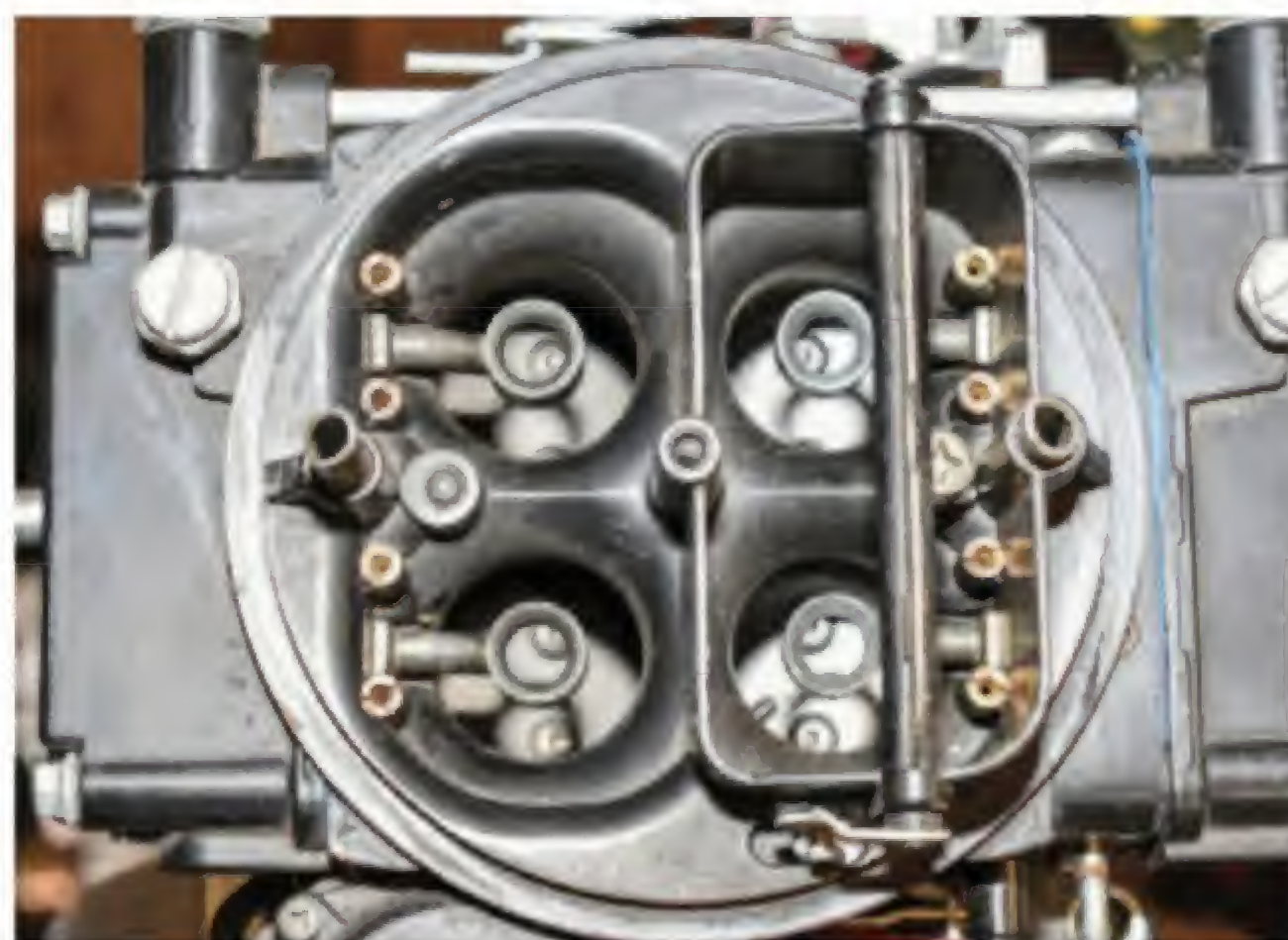
*Tom Gunther
Via the Internet*



■ Most carburetors use fixed air bleeds. This is one of several (arrow) on an Edelbrock AVS carburetor.



■ While the Edelbrock's air bleeds are fixed, tuning is easily done with jets as well as the metering rods and staging springs under these covers (arrows).



■ This Quick Fuel carburetor has changeable air bleeds adjacent to each venturi for idle and high-speed operations (they look like jets).



■ FST's 850-cfm Billet X-treme Pro carburetor has adjustable air bleeds for idle, intermediate operation, as well as upper and lower ends of the high-speed circuit. There are also four additional idle bleeds around the air cleaner stud hole.

A Although it's generally considered a replacement truck engine, the HT383 is a great choice for a street rod. While there may be crate engines that make bigger horsepower numbers on a dyno, the HT383's torque will do a respectable job of launching your sedan from a standing start and pulling it up hills in overdrive with all the power accessories on. Your friend has the right idea. The reality is torque is what moves the car and you don't drive a dyno.

When selecting a carburetor the most common mistake is going too large. A commonly used formula for carburetor sizing is: engine size in cubic inches multiplied by maximum rpm divided by 3,456. In this case the maximum recommended engine speed from Chevrolet for an HT383 is 5,000 rpm: $383 \times 5,000 = 1,915,000 / 3,456 = 554$ cfm. Keep in mind that is for an engine that has 100 percent volumetric efficiency (VE), which means that the engine fills the cylinders completely. In operation, most stock engines have a VE rating of approximately 80 percent.

While our number crunching says one thing, Chevrolet says something else. They recommend a 750- or 770-cfm carburetor for maximum performance. That being said, a 650-cfm carburetor would provide good throttle response and work well for the type of use you have planned.

On the subject of air bleeds, just about all carburetors have them. Their purpose is to mix a small amount of air with the fuel before it's drawn into the throttle bores. In standard carburetors these bleeds are a fixed size and are usually referred to as emulsion tubes. High-performance carburetors have changeable bleeds as a tuning aid; however this is something that is best left to carburetor experts. Our advice is don't go too big, and keep it simple.



STREET ROD STEEL

OVER 50 WHEEL STYLES—HANDCRAFTED IN AMERICA

64 SERIES O.E. FORD



71 SERIES STREET ROD WIRE



17 SERIES ARTILLERY



12 SERIES SMOOTHIE

Wheel Vintiques

CUSTOM POWDER COATING & BACK SPACING AVAILABLE

866-267-6681 | WHEELVINTIQUES.COM

The brake that started it all



YOU ASKED.
WE ANSWERED.

Front and rear packages available
Powder coated Red calipers
Modern brakes for small wheels
Stainless braided brake hoses
Slot, drill, zinc plated rotors
Affordable prices



www.BAER.com

PONTIAC MICHIGAN AUGUST 9TH - 10TH

WOODWARD DRAG RACING IS BACK



ROADKILL
NIGHTS
POWERED BY DODGE

ROADKILL RETURNS TO WOODWARD AVENUE
WITH AUTOMOTIVE MAYHEM FOR THE WHOLE FAMILY
VISIT ROADKILL.COM/NIGHTS FOR MORE INFO

TANKS
Inc.

877-596-3842
www.tanksinc.com

**37-40 Chevy
Business Coupe**



42" x 21-1/2" x 5-3/4"

18 Gallons

Fits 37-40
Chevy
Passenger
Coupe &
Sedan
Delivery.

**Universal
Tanks**

16 Gallons
34" x 15" x 7.5"
U9-A Steel ...\$250
U9-SS SS...\$350



Available with two
neck locations.

41-48 Dodge & Plymouth



#48DP-A
Steel...\$230

30" x 16" x 8"

**1932
Ford**

Starting at
\$350



Available in poly, steel & stainless steel.
Conversions for your 28-31 Model A car are also available.

• 260 Welter Drive • Monticello, IA 52310 •

HIGH-TECH GAUGES. CLASSIC STYLE.

SPEEDHUT

CUSTOMIZE YOUR CLASSIC.

Covering your classic ride with dirt and race stripes is one way to personalize it. But if you want to take it a step further, add a high-performance Speedhut custom gauge. Whether you design it to match the color of your vehicle or add your company's logo, our unrivaled customization process ensures your gauge will be as unique as you are.



Gauges by Speedhut
Ford Mustang • Photos by Jessi Leda

Lifetime Warranty • Made in USA • Fully Customizable

801.221.1460 • Speedhut.com • Sales@Speedhut.com



Factory Five customer Marcel M. from Santa Clarita, CA earned "Picture of the Month" on TheFactoryFiveForum.com with this photo of the Mk4 he built.

Factory Five Racing Better Than It Ever Was!

Factory Fives are better than the original cars in every single way, except they cost less and aren't very good at staying parked. Factory Fives are faster, safer, more comfortable, more reliable, and drive like modern sports cars. Even better, in a world of mass-manufactured cars, you get to build YOUR Factory Five YOUR way! Free brochure & DVD: 508-291-3443 or factoryfive.com

HOT ROD DRAG WEEK 2010

PRESENTED BY
OVERDRIVE
GY GEAR VENDORS

BUILD IT, DRIVE IT, RACE IT!

Celebrate 15 years of Hot Rod Drag Week September 8th thru 13th

SEPT. 8

Registration / Test & Tune
Virginia
Motorsports Park
North Dinwiddie, VA

SEPT. 9

Day 1
Virginia
Motorsports Park
North Dinwiddie, VA

SEPT. 10

Day 2
Cecil County
Dragway
Rising Sun, MD

SEPT. 11

Day 3
Atco
Dragway
Atco, NJ

SEPT. 12

Day 4
Maryland Int'l
Raceway
Budds Creek, MD

SEPT. 13

Finals Day
Virginia
Motorsports Park
North Dinwiddie, VA

VISIT HOTROD.COM/EVENTS/DRAG-WEEK FOR EVENT DETAILS.

OVERDRIVE
GY GEAR VENDORS

AT
PERFORMANCE
PRODUCTS

ISKY
RACING CAMS

NOS

MAHLE
Motorsport

Rockwell Brand
Racing Fuel

PRECISION
TURBO
ENGINE



**PROUD TO SAY
MADE IN THE USA!**



- Patented Leak Free Flange Eliminates Gaskets
- Heavy Duty, 16 Gauge Tubing & 3/8 in. Flanges for Down the Road Quality
- All Required Hardware is Included
- In House HiTemp Ceramic Coating
- Swivel Flanges Ease Installation

Our new 72 pg. color Catalog has over 170 header designs plus tech info and car features. Just \$6.00 Postpaid!



Since 1964
www.sandersonheaders.com



Joe Monohan's '54 Buick "Great Balls of Fire" runs a 401 cu. in. Nailhead with Sanderson HiTemp silver ceramic coated BNH1 Headers. Photo by DC Imagery/D. Chartier



1.800.669.2430



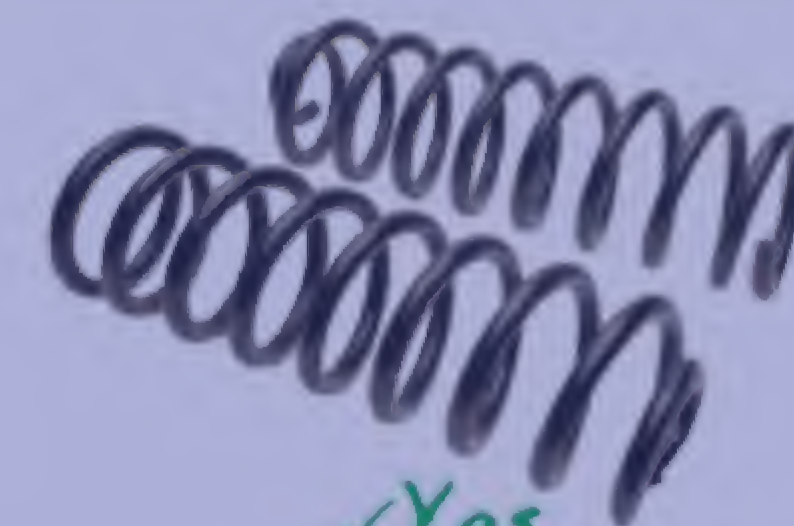
517 Railroad Avenue South San Francisco CA 94080



✓Yes



✓Yes



✓Yes



✓Yes



xNo



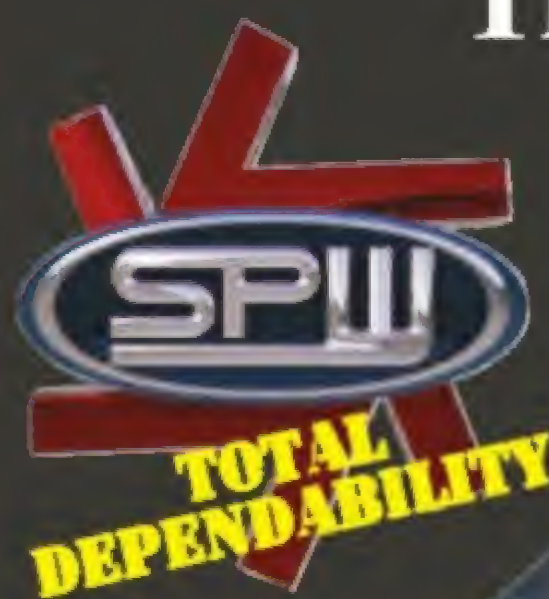
✓Yes

- ✓ Reliably Low Prices
 - ✓ Easy To Use Website
 - ✓ Huge Selection
 - ✓ Fast Shipping
- www.rockauto.com

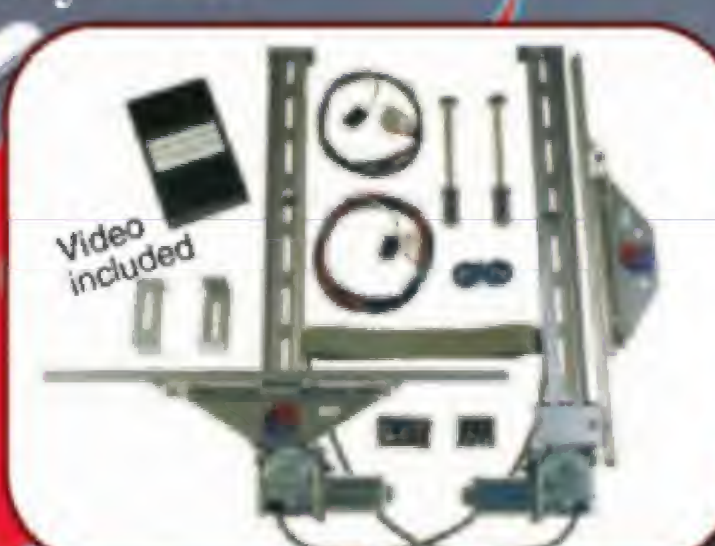


Specialty Power Windows and Wipers

The only ones Guaranteed for Life



All wiper kits are 2-speed and self-parking. "Custom-Fit" power window kits for Model A's through cars of the 1960's—all made with the same motors and switches used by GM.



Made in Fosythe, Georgia, USA



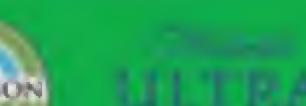
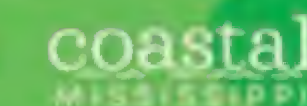
Call toll free 1-800-634-9801
www.SpecialtyPowerWindows.com

Let's Go Cruisin'!



Join us on the Mississippi Gulf Coast, Oct. 6-13, 2019
for America's Largest Block Party with cruise-ins, headline bands
& oldies entertainment, Vicari Auction's CTC Swap Meet,
the CTC/Vicari Auto Auction and more!

Book your rooms through MS Gulf Coast Hotel Reservations at 1-888-388-1006.



www.cruisinthecoast.com
1-888-808-1188

Inline tube.com
The Professional Restorers #1 Choice

Preformed Brake & Fuel Lines for Production Vehicles

Fittings

Brake & Fuel Lines

Straight Length
Brake Clips
Spring Wrap
Tube Nuts
Fittings
Tubing
& more

Stainless Brake Hoses

Soft Bending
& Flaring
Stainless
Tubing

Bulk Tubing

Premium
Stainless or OEM

Clips

Straight Length Sets

Disc Conversions

Many
Exclusive
New Products!

Tubing Tools

Prop Valves

BECOME A DEALER
Contact us to learn more!

Online Catalog & Ordering @
Inline tube.com
Brake Plumbing Products
18000 Technology Dr. Shelby Twp, Michigan 48068
Order (800)385-9452 Ph (586)532-1338

SAR STREET RODS

Steve's Auto Restorations
www.stevesautorestorations.com
503-665-2222



Quality craftsmanship is key in the world of restoration. The same is true in street rod design and construction. For over 40 years Steve's Auto Restorations has crafted some of the finest, award-winning hot rods, street rods, customs and concours restorations. From concept to "turn-key" Steve's can transform your automotive desires into reality, all under one roof. Call or visit our website to see how we can help you with your next custom project.

42 YEARS OF AWARD-WINNING EXCELLENCE



FiTech Fuel Injection

EASY STREET EFI

- 850 CFM
- New Classic Carb Gold Finish
- Supports up to 600HP

Part #30005

NEW! GO SHIFT TRANS CONTROLLER

GM 4L60/65/80/85E

- Shift point & torque converter lock-up control
- Improves shift firmness
- Gear ratio and tire diameter adjustable
- Paddle shift capable

Part #20010

RETRO LS

Includes complete harness

Intake not included

Part #37001

TRUE SELF-LEARNING SYSTEMS FOR LESS!

ULTRA RAM SBC EFI

Part #38301

- Retro LS complete self-tuning induction systems for LS engines
- Self-contained unit controls fuel, spark and GM 4L60/65/80/85E transmissions
- Self-tuning EFI induction system for small-block Chevys
- Supports up to 600HP

TO LEARN MORE CALL 951-340-2624 • FITECHEFI.COM | **FiTech** - fuel injection - fuel systems

CHARGING FINISHES

WHETHER YOUR ENGINE IS RESTORED, DETAILED IN CHROME OR WRAPPED IN BLACK, POWERMASTER HAS THE FINISH TO MATCH!

- SHOW QUALITY FINISHED AND DETAILED
- DESIGNED TO PRODUCE HIGH OUTPUT ACROSS THE ENTIRE RPM RANGE
- BLUEPRINTED AND BALANCED DURING ASSEMBLY
- BAFFLE PLATES, V-BELT AND SERPENTINE PULLEYS AVAILABLE
- MODELS AVAILABLE FOR MOST GM, FORD AND MOPAR APPLICATIONS

POWERMASTER Performance

BRUSHED BLACK

POLISHED OR CHROME

NATURAL

MADE IN USA

GIVE US A CALL 630-957-4019

POWERMASTERPERFORMANCE.COM

TRUSTED BY THE BEST.



JOSH LEISINGER
1964 CORVETTE
WARREN JOHNSON LSR
GEARSTAR TH-400

The Summit Racing Equipment/Leisinger autocross team has relied on the durability and strength of Gearstar for over 10 years!

- ★ Custom built to support the power of your rod
- ★ 100 mile dyno test and 36 month warranty
- ★ Assembled by one tech from start to finish
- ★ Six speed trans and converters now available

TOP BUILDERS AND RACERS TRUST GEARSTAR

GEARSTAR PERFORMANCE TRANSMISSIONS

Order Code: SRM
330-434-5216
GEARSTAR.com

YANK Performance CONVERTERS
CONVERTER.cc

COOL CRAFT HIGH PERFORMANCE RADIATORS

888.587.7234

RADIATORS THAT LOOK & FIT RIGHT!

EARLY CHEVY

1937 - 1954

Drop-In Replacement Starting At \$351

'39-'41 Pictured

FORD STREET ROD

1928 - 1951 Available w/ Condensers

Starting At \$568

'32-'35 & '40-'41

'32 Pictured \$741

'33-'34 Pictured

TRI-5 CROSSFLOW

Starting At \$679

Shroud & Fan package pictured. Also available without shroud/fans.

57-59 FAIRLANE/EDSEL

Drop-In Replacement 3-Row Starting At \$351

2 Row High Efficiency Aluminum \$399

IMPALA / FS CHEVY

1958 - 1970

Drop-In Replacement Starting At \$320

'64-'69 Pictured \$351

THUNDERBIRD

'55-'57 & '80-'84

Drop-In Replacement Starting At \$320

'55-'57 Pictured \$405

'55-'57 Pictured

TRANS COOLERS

Dual Pass Transmission Coolers!

12" 18" & 24" Polished or Satin Finish

These are dual pass!

Starting At \$112

SHROUDS

Custom Shrouds - Utilize Your Entire Core!

Starting At \$100

All we need is your core size. Available with or without fans. For use with electric fans only.

EASY ON-LINE ORDERING

Welcome to Cool Craft

Home of the largest selection of Hot Rod, Muscle Car & Classic Truck Radiators, Period!

Find the radiator you need fast!

Hot Deals To Cool Your Ride!

Custom Shrouds based on your design

COOL CRAFT COMPONENTS / WWW.COOLCRAFT.COM

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

Made USA **HEADWINDS** Since 1992

The Leader in Custom Lighting

LED Bulbs

Headlights 4-1/2" x 5-3/4" x 7"

Stop/Turn/Tail Light \$33.95/pair

Wire Conduit

Headlight H4 6v & 12v \$119.95/pair

Lamps w/Turns

Headlight Adapters

pre-40's cars

Buick Dodge Olds
Cadillac Ford Packard
Chevy Hudson Plymouth
Chrysler Int'l Harv Pontiac
De Soto LaSalle Studebaker

NEW '34 Olds

626-359-8044 headwinds.com

ISKY RACING CAMS

"DO IT RIGHT...RACE WITH A LEGEND"



YOUR LS HEADQUARTERS

POWERING WINNERS FOR OVER 70 YEARS!



1-310-217-9232

iskycams.com

HEINZMAN Street Rod Shop

- PARTS • CHASSIS
- TURN-KEY CARS
- FABRICATION

'28-70 Fords, '34-81 Chevys, Mustangs, Camaros, Muscle Cars and Classic Trucks

- EXCHANGE your frame for a complete FINISHED CHASSIS- '35-48 Fords, '48-56 Ford PU, '37-48 Chevy, '37-59 Chevy PU
- Sheet metal • Chopped Tops • Interiors
- Paint Booth • LS and Cobra Engine Swaps
- Project Cars
- Repro Parts

Since 1973!

FREE New Big Catalog

www.heinzmanstreetrods.com

402-886-2275 FAX: 402-886-2998

1305 North C Road, Phillips, NE 68865

Performachrome™ Beautification to 1600°

"World's brightest ceramic coating"

Cast Iron manifolds

Steel Exhaust

Aluminum intakes

Ask us about our Stealth Black and Cast Iron Gray restoration finishes!

PERFORMANCE COATINGS

"We can take the heat"

www.headercoatings.com

770-478-2775

Get Them Your Way

This is just one of the millions of ways you can create your look for a new set of TwinThree gauges with our online Instrument Builder. Head to our website now to create a custom instrument set "Your Way".

CON2R.com 503.626.6390

Beaverton, OR

ROCKY HINGE INC. Street Rod & Custom

37-38 CHEVY COUPE BOLT-IN TRUNK HINGE

Polished \$225/pr. \$255/pr.

ROCKY HIDDEN HINGE KIT

BRASS BUSHINGS FOR LONG LIFE

Hidden or Suicide w/Latches and Install Kit \$325 \$395

POWER COWL VENT

UPDATED DESIGN

Pre-Wired w/Switch Many Applications \$124.95

55 CHEVY TAIL LIGHT HIDDEN GAS FILLER

Power Opening Tail Light Lens & Seal not included \$419

POWER SAFETY LOCK KIT W/ALUM KNOBS

Power Manual \$125 \$74.95

Street Drive ACCESSORY DRIVE SYSTEMS

SMALL BLOCK FORD

Mechanical Fuel Pump compatible

Complete w/PWR Steering Polished \$1,625

SMALL BLOCK CHEVY

Complete w/PWR Steering Polished \$1,562

BIG BLOCK CHEVY

Complete w/PWR Steering Polished \$1,593

Call 1-888-539-6295

See More @ mcmillanrodandcustom.com (715) 387-6847

McMillan

Red & Custom

Fabricators of polished stainless steel components for Hot Rods & Customs

We also make:

- Chin & Nerf Bars
- Accents
- Hood Vents
- Bumpers & Brackets

Custom-Made RUNNING BOARD STRIPS

Juliano's Hot Rod Parts

SINCE 1969 Ellington, CT

- STEERING WHEELS
- PRO-CLAMP™
- SEAT BELTS
- HYDROGRAPHICS

FREE catalog

860-872-1932 • JULIANOS.COM • 800-300-1932

HOT ROD REUNIONS



Spectator Tickets
NHRA.COM/HOTRODREUNIONS
1-800-884-6472

17th Holley National
June 13-15, 2019
Beech Bend Raceway
Bowling Green, KY

28th California
October 24-26, 2019
Auto Club Famoso Raceway
Bakersfield, CA

NHRAMUSEUM.ORG
All Proceeds Benefit the non-profit
Wally Parks NHRA Motorsports Museum
Photography courtesy of Michael Dorman

RACEPAK

MANUFACTURERS OF EASY TO INSTALL KITS AND ACCESSORIES



- Lowering Kits
- Brake Pedal Kits
- Power Steering Kits
- Engine/Trans Conv Kits
- Rear Axle Installation Kits
- Headlight Rings for Frenching

GENUINE BUTCH'S COOL STUFF HOT ROD PARTS

We have the stuff you need for your 28/56 Mopar!

We have the stuff you need for 49/59 Ford/Mercl

We have new stuff for 37/54 Chevy

CHECK OUT OUR WEBSITE!

Frenching Rings with Stainless Inner Trim \$150 set
No Seams Available separately

Reproduction Visi-Bowl Gas Pumps
Comes in 2 sizes: 8' or 10'
All Aluminum Construction
Never rust-Very High Quality
Ready to Paint & Assemble
5 Gallon \$1250, 10 Gallon \$1350

Butch's Cool Stuff
Real & Custom Solutions

www.butchscoolstuff.com 937-260-2451 terry@butchscoolstuff.com
715 N. Dayton Lakeview Rd., New Carlisle, OH 45344

RUTTER'S ROD SHOP

(704) 462-1050

BUILDER PARTS CONSULTING

We can build as mild or as WILD as you want!

www.ruttersrodshop.com



2018 Detroit Autorama Award Winner

1930 Model A Built at RRS by owner Bob Rutledge

FINALLY, A solution to an old problem!



JJ's Rods
A Firewall Rubber Boot Seal

Optional inserts shown above

Seal up the firewall with this Firewall Steering Column Rubber Boot Seal

Fits all steering columns 3/4" to 2 1/4" hole size

www.jjsrods • 704.681.1357 • Wingate, NC

NSRA WINNER - 2018 New Product of the Year
SEMA WINNER - 3 Global Media Awards
Patent Pending

BLACKDOG Speed Shop

Our team builds winning race cars.

Imagine what we can build for the street.



Professional street rod, street machine and muscle car builders. New technology and performance tuning experts.

600 Barclay Blvd, Lincolnshire, IL 60069
1-847-634-7534
blackdogspeedshop.com

GOT RUST? NO PROBLEM

Skat Blast Cabinets remove rust & paint FAST

USA SC33V TOP-LOAD

34" wide, 22" deep, 20 1/2" h work area

- 22 ga steel
- Trigger gun
- 12" x 24" lens
- HEPA Vacuum
- 3 nozzles
- Floodlight holder less bulb • 24" L gloves • 50 lbs abrasive
- Recycles • Requires 10-15 cfm air

#SC-33V \$799

REDUCED SHIPPING
Add \$60 for these states - Reg \$110
DC, DE, IL, IN, KY, MD, MI, NC, NJ, NY, OH, PA, TN, VA & WV.

See website for shipping to other states.



USA SC35V SLANT TOP

34" w, 28" d, 27" high work area

- 11-22 gauge steel
- 12" x 24" lens
- 28" long gloves
- HEPA Vacuum • Floodlight holder less bulb • 3 nozzles • 50 lbs abrasive • Recycles
- Requires 10-15 cfm air

#SC-35V \$999

REDUCED SHIPPING
Add \$90 for these states - Reg \$140
DC, DE, IL, IN, KY, MD, MI, NC, NJ, NY, OH, PA, TN, VA & WV.

See website for shipping to other states.

Skat Blast Cabinets feature a 90-Day Shop Trial & 5-Year Limited Warranty

FREE 156-pg Catalog **TP TOOLS & Equipment** Sale ends 9/30/19

www.tptools.com/sr



NOW \$199.99*

STARTING AT



Power. Performance. Reliability. When you've got an OPTIMA® battery, you can count on The Ultimate Power Source® to bring you nothing but the best. From the legendary SPIRALCELL TECHNOLOGY® that paved its way into history, to the all-new YELLOWTOP® with PUREFLOW TECHNOLOGY™. No matter if you're on-track, off-road or on the highway, there's an OPTIMA battery that's built to fit and perform for you.

TO BUY, VISIT OPTIMABATTERIES.COM OR YOUR LOCAL AUTO PARTS RETAILER.

*Price based on REDTOP® 25, REDTOP 35 and REDTOP 75/25. The OPTIMA logo, OPTIMA Batteries, The Ultimate Power Source, the PUREFLOW logo, PUREFLOW TECHNOLOGY, SPIRALCELL TECHNOLOGY, YELLOWTOP, REDTOP, BLUETOP and The SIX-PACK Battery Design are trademarks of Johnson Controls, Inc. ©2018

OPTIMA BATTERIES Johnson Controls

KUGEL KOMPONENTS

The Originator of Street Rod Independent Suspensions!!

Cast stainless steel a-arms optional



IFS SYSTEMS
For most cars, trucks & custom builds

STARTING AT \$3,195

Made in the USA! Matching IRS Available

225mph Bonneville Salt Flats August '09



Fully Equipped Kugel Komponent Chassis Proven Performance!

We also build complete chassis. Call us!

451 PARK INDUSTRIAL DR. • LA HABRA, CA 90631
(562) 691-7006
All prices subject to change and do not include shipping and handling
kugelkomponents.com

VOL. 9 CATALOG NOW AVAILABLE

NEW PRODUCT Y-STRAPS
HSK1 002

ALL KITS ARE NOW AVAILABLE IN A VARIETY OF DIFFERENT FINISHES!!!

NEW PRODUCT DOOR PULLS
VRP1001

NEW PRODUCT DOOR CHECKS
VRP1002

Vintage Hood Strap Kit
HSK1 001

LIMEWORKS
Hot Rod Parts

1.562.698.1227
SALES@LIMEWORKSHOTRODPARTS.COM

WHEEL SMITH

MADE TO ORDER WHEELS BY REAL CAR GUYS IN THE USA

Call Today! **866-210-9905**
For The Latest Specials Visit: TheWheelsmith.net

NotchHead Hard, Soft & Braided Line Clamps

THE SECRET TO SUCCESS IS KEEPING EVERYTHING STRAIGHT

HARD, SOFT & BRAIDED LINE CLAMPS

- The ultimate solution for mounting hard, soft and braided lines
- Specifically designed to eliminate the need for Z-bends
- Concealed attachment for a clean appearance

NOTCHHEAD (360) 243-3492
PARTS, TOOLS & ACCESSORIES WWW.NOTCHEAD.COM

HOTROD NETWORK

IF IT ISN'T HERE, IT ISN'T HAPPENING

HOTROD.COM

Wilson Welding & Machine

• Finned cast aluminum
• All new components
• Ready to install
• Use with Buick drums

• "39" Lincoln all steel stamped steel reproduction
• Front or rear
• 12" Bendix style brake
• Use with Ford or Buick drums

Coming Soon! Buick and Inly style drums and hubs!

Wilson Welding & Machine
2224 Sleepy Lagoon
Flower Mound, TX 75022
Phone: 214-662-9483 / 972-539-2306 fax
www.wilsonweldingandmachine.com

OVAL TUBING EXHAUST SYSTEMS

LOW-PROFILE MUFFLERS / X-PIPE KITS
TRANSITIONS / ELBOWS / BENDS

888.550.7746
SPINTECHMUFFLERS.COM

THE SOUND OF SPEED

HOT HEADS RESEARCH & RACING, INC

Complete Line of Rebuild & Dress Up Parts In Stock

SPECIALIZING IN '51-'58 CHRYSLER, DODGE AND DESOTO HEMI'S.

The Leader in early HEMI parts development. All Hot Heads manufactured parts are made in the USA.

For Quality Products and Knowledgeable Advice

392 Walker's Hollow Trail
Lowgap NC 27024
336-352-4866 • Fax: 336-352-3892
www.hothemiheads.com
Bob Walker, owner, serving HEMI engine fans since 1992

CALL FOR CATALOG \$5.00

VISIT OUR FREE STRICKLY HEMI MEET AT WWW.HOTHEMIHEADS.COM

EXTENDED REACH CUTTERS

Drill through holes in pipe or tubing in a single pass using Blair Extended Reach Sheet Metal Hole Cutters. Features a one piece arbor and cutter for a fast easy cutting action. The tools can drill holes in materials up to 1/4" thick & are available individually or in a kit.

Made in USA

Blair

Blair Equipment Co.
www.blairEquipment.com
800-426-7818

GOTTA SHOW

"Bullet Proof" Power Steering Hose Kits

We have designed a variety of power steering hose kits that solve the fitting identification and clearance problems typically found with hot rods.

All of our hose units have the correct ends - no adaptors are necessary

Transmission Cooler Hose Kits



Stainless Steel A/C and Heater Hose Kits



www.gottashow.com
(602) 237-4506



OUR TRANSMISSIONS ARE NOT JUST BUILT... THEY'RE PERFORMABUILT.

Take your street rod project to the next level with a PermaBuilt transmission. We have a full line of GM and Ford overdrive transmissions to handle up to 1000+ hp as well as the old school 3 speed automatics. Whether you have a cruiser or street/strip performer, we've got you covered.

**CHECK OUT OUR
FULL OFFERING!**

(888) 744-6542
WWW.PERFORMABUILT.COM



Just what you were looking for!

Pick-up Seats

We have the largest selection of seating
to fit 1927 to 1955+ years.



Frames, Foam packages, Upholstered Seating, We Have It All!

**For all our frames and products check us out at
wiseguys-seats.com / 1-866-494-7348**

Like us on face book - Wise Guys Seats & Acc



1932 Steel Convertible Bodies



The Roadster That's Ready to Go In Any Weather



ALL BODIES INCLUDE:

- Complete Top • Polished SS Windshield
- Power Windows with Glass
- Incorporated Full Steel Substructure for Maximum Strength

Visit us online: **www.DearBornDeuce32.com**

Phone **860.669.3232**

e-Mail **info@dearborndeuce32.com**

Made in Detroit MI

STREET AD INDEX RODDER

THE WORLD'S RODDING AUTHORITY

ALAN GROVE COMPONENTS.....	121
ART MORRISON ENTERPRISES	30-31
AUTO METER PRODUCTS INC.....	83
AUTOMOTIVE RACING PRODUCTS	69
BAER RACING.....	106
BLACKDOG SPEED SHOP.....	116
BLAIR EQUIPMENT.....	119
BOB DRAKE REPRODUCTIONS.....	32-33
BORGESON UNIVERSAL COMPANY	77
BUTCHS COOL STUFF	116
CAROLINA CUSTOM HOT ROD PARTS	91
CHEVROLET PERFORMANCE PARTS.....	9
CLASSIC INSTRUMENTS.....	11
CLASSIC PERFORMANCE PRODUCTS	58-59
COKER TIRE.....	84-85
CON2R.....	115
CONTROL CABLES INC.....	42
CRUISIN THE COAST	111
DAKOTA DIGITAL	C3
DEARBORN DEUCE LLC.....	120
DYNAMIC CONTROL/LINE CREEK	99
DYNOTECH DRIVESHAFTS	57
ELECTRIC LIFE	51
FACTORY FIVE RACING INC.....	108
FATMAN FABRICATIONS.....	37
FITECH FUEL	112
FLAMING RIVER INDUSTRIES	C4
FORD RACING PERFORMANCE PARTS.....	61
FPM INC	121
GEARSTAR AMERICAN PERFORMANCE	113
GOLDEN STAR CLASSIC AUTO PARTS.....	13
GOTTA SHOW	119
HAGAN ST ROD NECESSITIES.....	63
HARBOR FREIGHT TOOLS	4-7
HEADWINDS INC.....	114
HEINZMAN STREET RODS.....	114
HOLLYWOOD HOT RODS	89
HOT HEADS.....	119
HOUSE OF KOLOR.....	27
IN LINE TUBE.....	112
ISKENDERIAN ED RACING CAMS	115
JJS E-Z FIREWALL BOOTS.....	116
JOHNS INDUSTRIES INC.....	121
JULIANOS INTERIOR PRODUCTS	115
KUGELS KOMPONENTS.....	117
LIMEWORKS.....	118
LOKAR INC	C2

LS CLASSIC	43
MAGNUM SUSPENSION AND HOT ROD PARTS...	80
MCMILLAN ROD AND CUSTOM	114
MECUM AUCTION CO	53
NEW PORT ENGINEERING	97
NHRA MOTORSPORTS MUSEUM.....	116
NOTCHHEAD	118
OLD DOG STREET RODS.....	56
OPTIMA BATTERIES.....	39, 117
PAINLESS PERFORMANCE PARTS	81
PERF COATING.....	115
PERFORMABUILT TRANSMISSIONS	120
PERFORMANCE ONLINE.....	67
PERTRONIX INC.....	41
PHANTOM PRODUCTS	79
POWERMASTER PERFORMANCE	113
PROGRESSIVE INSURANCE.....	25
ROADSTER SHOP.....	15, 46-47
ROCK AUTO	111
ROCKY HINGE CO.....	115
ROD GARAGE	97
RUTTERS ROD SHOP	116
SANDERSON HEADERS.....	110
SCOTTS HOTRODS N CUSTOMS INC.....	23
SHADOW RODS.....	78
SOUTHERN RODS AND PARTS	12
SPECIALTY POWER WINDOWS	110
SPEED HUT.....	108
SPEEDWAY MOTORS.....	95
SPIN TECH MUFFLERS.....	118
STEVES AUTO RESTORATION.....	112
STREET ROD HEADQUARTERS	28-29
SUMMIT RACING.....	17
TANKS INC.....	106
TCI ENGINEERING.....	78
TP TOOLS EQUIPMENT	117
UNITED PACIFIC INDUSTRIES INC	103
U.S. RADIATOR	114
VINTAGE AIR	55
WHEEL SMITH	118
WHEEL VINTQUES.....	105
WILSON WELDING	118
WILWOOD ENGINEERING.....	73
WISE GUYS SEATS.....	120
YOGIS STREET ROD ACCESSORIES.....	45

The Advertiser Index is provided as a service to STREET RODDER magazine readers. STREET RODDER magazine is not responsible for omissions or for typographical errors in names or page numbers.

THE QUIET ZONE



**JOHN'S
INDUSTRIES**
SATISFACTION BEYOND EXPECTATION

1.800.332.3450
www.johnsindustries.com



FPM METALS



ENGINE TURNED METALS

Custom-Made Dash Or Firewalls » Sheet Stock Available

402-729-2264 fpmmetals.com

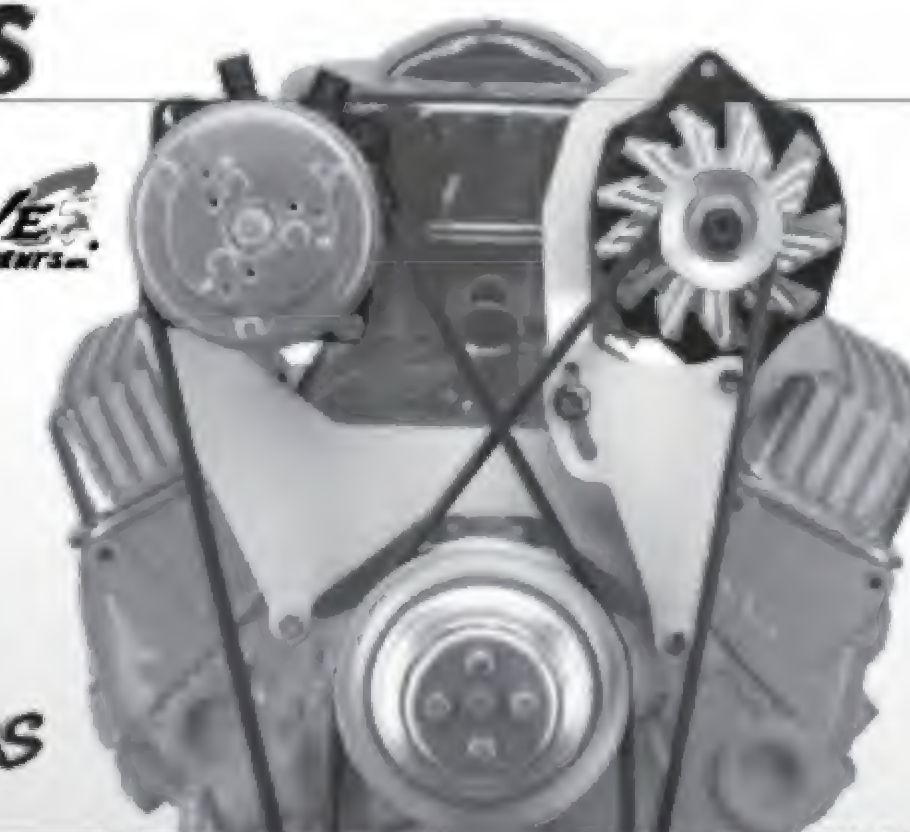
SAMPLES AND INFO:
\$3.00

STEEL BRACKETS

**ALAN GROVE
COMPONENTS, INC.**

**ALAN
GROVE
COMPONENTS**

- Alternator.
- A.C. Compressor.
- Power Steering.
- Over 100 Brackets Available.
- Affordably Priced.
- 30 Years of Experience.

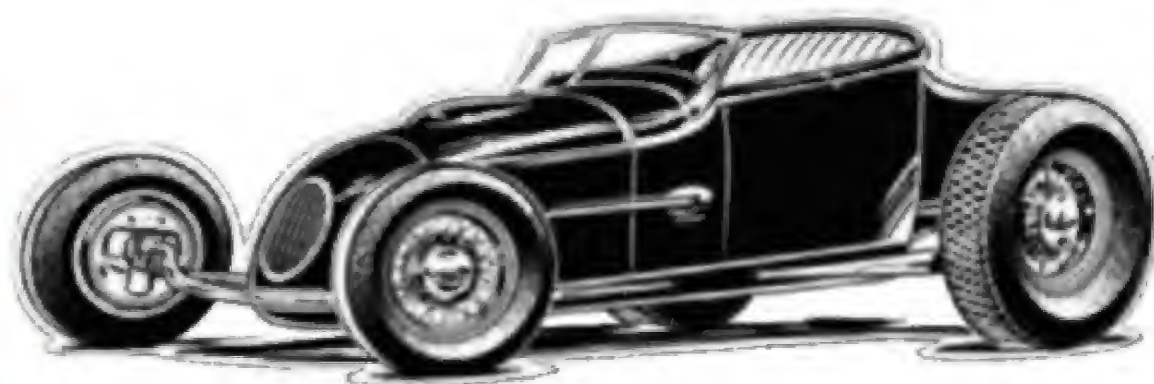


**FREE
CATALOGS**

PHONE: 913-837-4368
FAX: 913-837-5721

www.agcbracket.com

PROFESSOR HAMMER



Ron Covell

Making Running Boards

Q I need to make running boards for my '31 Dodge. I read your advice in a previous column to someone who asked about building running boards. You recommended building it in two halves, using a Rounding-Over die to curl the edges and then welding them together. I just bought a bead roller, but I don't have a TIG welder, and I believe MIG welding and smoothing that long joint will be difficult. Perhaps I could weld it from the back side, but doesn't MIG welding harden the metal?



■ This running board is mostly straight, but the curved flange on the inner edge adds some complication. This month, we'll explore some different ways to make this part.

I have been working with wood for 30-plus years, and I believe I can make a solid wooden form to match this shape. Do you think it would be possible to hammer one piece of metal around a form to shape the running board like I saw in your *Hammerforming* DVD? If so, do you have a recommendation on the type of metal to use and thickness?

Ken
Via email

A As you saw in my DVD, it is possible to make a wooden form, then clamp a flat piece of metal to it, and hammer the metal so it conforms to the shape of the wood. This is often used to form flanges on metal edges and your running boards appear to have approximately a 1-inch flange on the outer edge and about a 3-inch flange on the inner edge where it curls up to meet the body. The radius of the bends that form these flanges looks close to 1/2 inch, so they have about the same curvature as a piece of 1-inch tubing.

There is a limit to the width of a flange that can be made by working over a hammerform. Several variables affect this, including the radius of the corner, the curvature of the edge, and the thickness of the metal. It's hard to hammerform a flange more than about 1-1/2 inches wide, so forming the straight outer flange on your running board is feasible, but the taller (and curved) flange on the inner section is not. That's why I normally use two-piece construction for challenging details like this, and the best place to put the weld is in the center of the curve.

The advantage of using Rounding-Over dies is that they form a smooth, consistent 45-degree curl on the edge of the metal with a precise radius, with minimal distortion of the flat area. You could form this curled edge in other ways: you could make a wooden hammerform or you could work freehand over a T-dolly.

While it's true that MIG welds are harder (and usually larger) than TIG or gas welds, that just means it takes more time to sand them flat, people have been MIG welding

on auto bodies for decades with very durable results. You could make a case for welding the bottom side of the joint where the flat portion of the running board meets the vertical section going up to the body. This would put the weld bead on the convex side of the joint where it is easier to grind the weld bead smooth. You could also place a round (chill) bar on the concave side of the joint. This would help control the distortion by drawing some of the heat away from the weld, plus helping prevent "burn-through" as you are welding. It would also keep the bleed-through of the weld to a minimum, which would ease the cleanup of this area. The backing bar needs to be something other than steel, so the weld won't stick to it. My first choice would be copper or brass, but aluminum would work reasonably well.

I would recommend using cold-rolled steel, the same thickness as the original running board, which is probably between 16 and 18 gauge.

Good luck with your project, and write again if you need any more pointers.

► You can email your questions to Professor Hammer at covell@cruzio.com, or mail a letter to Covell Creative Metalworking, 106 Airport Blvd., Suite 105, Freedom, CA 95019. You will receive a personal reply. Ron Covell has made many videos on metalworking, and they can now be streamed or downloaded from his website! Check these out at covell.biz, along with his ongoing series of workshops held across the nation, or call for a current schedule of workshops and a free catalog of DVDs. Phone (831) 768-0705. Also, check out Ron's YouTube channel: www.youtube.com/user/covellron.

Retrotech

The new traditional



Retrotech direct-fit instrument systems:
cutting-edge technology
housed in a traditional aesthetic.



App for Configuration



Selectable Colors



Entry Screen Odometer



Dakota Digital

CALL TOLL FREE 1.888.852.3228
WWW.DAKOTADIGITAL.COM/SR

Steering You in the Right Direction®

FLAMING RIVER

VDOG™

Variable Angle Gear



Billet Option Available

SEMA 2019 BEST NEW STREET ROD PRODUCT

SEMA 2019 BEST ENGINEERED NEW PRODUCT

- 90° gear box with a variable angle shaft
- Articulating ball design
- Hardened Gear Drive System
- Vertical/horizontal mounting
- No chains or sprockets

pg. 98 in our catalog

FLOOR SHIFT TILT COLUMNS

Made from 304 Stainless Steel in paintable mill or polished finish



pg. 42 in our catalog

COLUMN ACCESSORIES



Make installing a Flaming River Steering Column easy and beautiful.

BANJO WHEEL

- Elegant 15" steering wheel, adapter included
- Made in Italy
- Horn button assembly included (made in USA)

pg. 81 in our catalog



COMPLETE CRADLE KITS

- The most complete cradle kits on the market.

pg. 113 in our catalog



- Designed to install to original mounting location.
- Manual or Power option available

UNIVERSAL JOINTS

Flaming River universal joints are CNC-machined for precision tolerances. Made in the USA.

pg. 103 in our catalog



303 Stainless Steel Joint Nickel Plated Billet Joint



Flaming River Industries, Inc.
800 Poertner Dr. Berea, OH 44017
1-866-815-3669
www.flamingriver.com

